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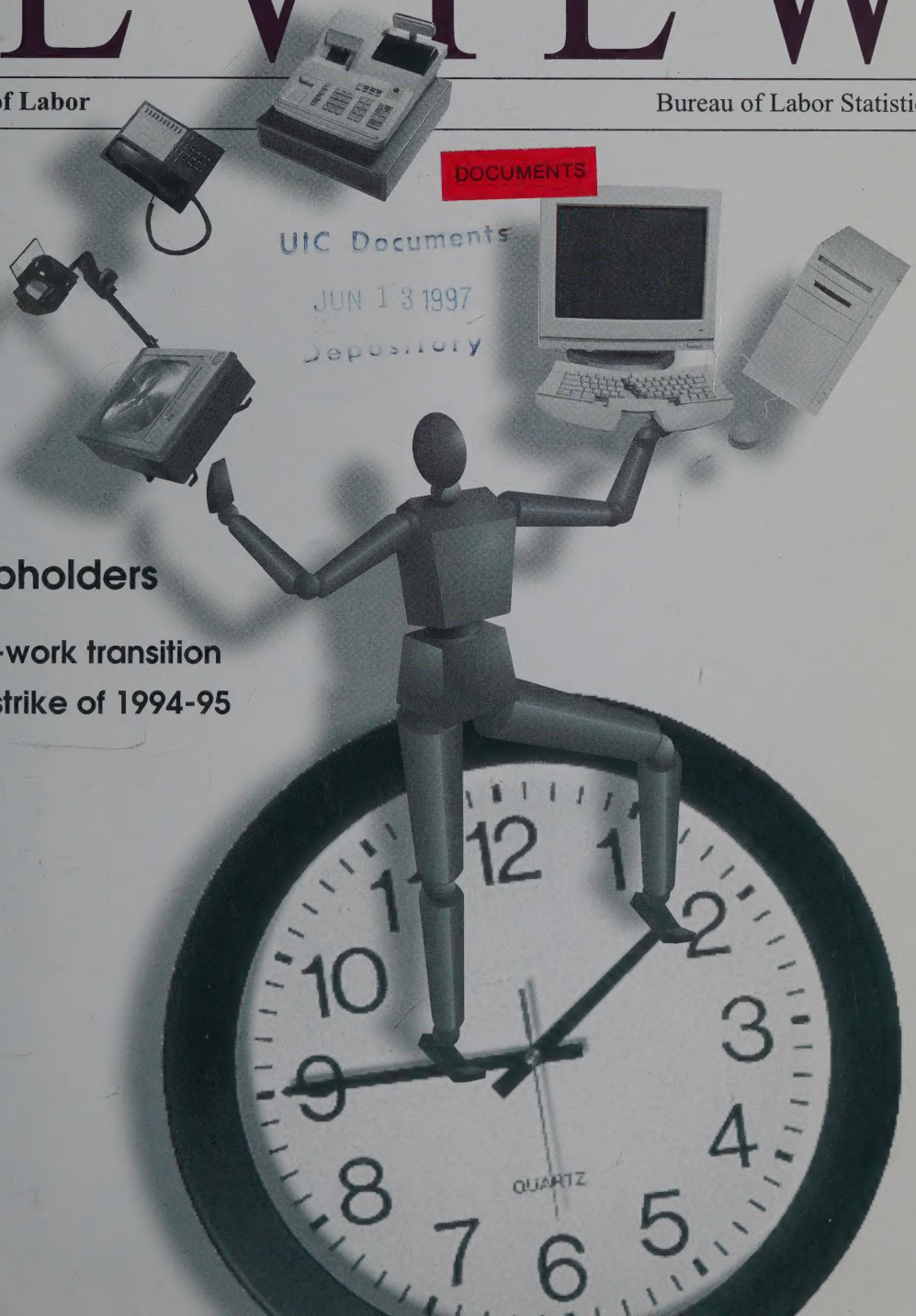

In this issue:

Multiple jobholders

The school-to-work transition

The baseball strike of 1994-95

U.S. Department of Labor

Bureau of Labor Statistics
Katharine G. Abraham, Commissioner

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Articles

New data on multiple jobholding available from CPS 3
Data on multiple jobholders help explain the difference in employment growth in the household and payroll surveys
John F. Stinson, Jr.

Characteristics of multiple jobholders 9
Scheduling concerns, individual talents, and financial needs all enter into the decision to hold more than one job
Thomas Amirault

U.S. and German youths: unemployment and the transition from school to work 16
In Germany, social consensus about the value of apprenticeship eases the move from school to work
Robert J. Gitter and Markus Scheuer

The baseball strike of 1994–95 21
The biggest strike ever in professional sports resulted in lost money for the owners and players and in disillusionment for fans
Paul D. Staudohar

Departments

Labor month in review 2
Book reviews 28
Current labor statistics 33

The March *Review*

Last month on this page, we summarized a paper that suggested that the incidence of work at the fringes of the standard workday was increasing, even as nonstandard shifts were becoming less common. This month's focus on multiple jobholding—sometimes called moonlighting—examines one of the possible explanations for such a trend. According to John F. Stinson, Jr., the rate of multiple jobholding increased from about 5 percent throughout the 1970s to just over 6 percent by the end of the 1980s. In 1996, Stinson finds from the redesigned Current Population Survey that now provides us with monthly rather than annual data on multiple jobholding, that 6.2 percent of workers are "moonlighting." If we make the plausible assumption that much of this activity is taking place just before or just after the workers' regular jobs, some of the widening of the standard day might be explained.

In the other article on multiple jobholding, Thomas Amirault explores the characteristics of moonlighters and moonlighting. He finds that people from a variety of primary occupations are homing in on a much narrower set of occupations for secondary jobs. The most frequently reported secondary jobs, by far, are as salesworkers in retail and as providers of personal services.

If the standard working day is indeed widening, whether from increases in multiple jobholding or some other reason, it could be that entertainments, including night baseball, would be postponed to later hours. If that were to occur, one hopes that such a change in the working conditions of professional sport could be implemented with less acrimony among the parties and disillusionment among the fans than the negotiations leading to the recent 232-day baseball strike chronicled by Professor Paul D. Staudohar.

Getting one's first job is, for many, and exciting, but often frustrating process. Robert J. Gitter and Markus Scheuer compare the very structured German model of school-to-work transition with the more flexible approach common in the United States.

www.wildcat.com?

The Internet will almost certainly change the way business is done and work is performed. But to become such an active marketplace, the Internet must overcome the "fundamental hurdle" of devising a way to securely exchange payments in cyberspace, according to James J. McAndrews in the Federal Reserve Bank of Philadelphia *Business Review*. Among the approaches being tried are trusted third-party payment, in which a customer authorizes a third party to make payments on his or her behalf, a method that will create the electronic version of a paper check, and credit card techniques. Because of the diffuse nature and openness of the Internet, however, the security of financial data, such as account numbers, is problematic and McAndrews writes that none of the measures used to authenticate payments today is foolproof.

One of the more esoteric approaches, "digital cash," may have an additional hurdle to overcome. Digital cash is a method by which an issuing institution authenticates a customer's digital messages in a way that a third party can recognize and accept. According to an article by Gerald P. Dwyer, Jr. in the Federal Reserve Bank of Atlanta *Economic Review*, this harkens back to the days of unregulated "free banking." Under free banking, private banks issued their own currency with no oversight of any kind by the Federal Government. Under such a regime, some bank operators located their premises in remote areas "where the wildcats roamed" to hamper attempts to redeem their notes. Such wildcat banks became synonymous with "financially unsound."

As Dwyer writes, "There may be similarities between electronic money and free banks' notes. Electronic money is likely to consist of uninsured liabilities of private individuals or companies. If so, perhaps the most immediate lessons from free banking are that (1) consumers are not sheep waiting to be sheared (2) attention must be paid to the importance of the assets into which the electronic money is convertible and to the issuer's reputation for making the conversion as promised."

Is New York different?

Like most observers of the City, the Federal Reserve Bank of New York found conflicting answers when they sponsored a Conference on the Metropolitan Economy in the National and World Arenas. Papers in the opening session agreed that employment in the New York area is generally dependent on the performance of the national economy but that there have been important exceptions to, and changes in, that relationship. The analyses differed sharply, however, in their characterizations of the relationship today.

Jonathan McCarthy and Charles Steindel, after decomposing the contributions of national and regional shocks to employment, concluded that New York was more dependent on national trends than it had been in decades. In contrast, Kenneth N. Kuttner and Agria M. Sbordone found that there had been a decrease in the magnitude of the region's response to national fluctuations at cyclical frequencies and that at longer time horizons, the New York area follows the Nation far less closely. An important difference between the two papers was the inclusion of broad industry variables by Kuttner and Sbordone, and, as a floor discussant suggested, finer industry breakdowns might help disentangle what are now identified as region-specific developments from what might be more accurately viewed as industry-specific shocks.

The conference papers appeared in the Federal Reserve Bank of New York *Economic Policy Review*. □

New data on multiple jobholding available from the CPS

Data on workers who hold more than one job are now regularly collected in the CPS; increases in the number of multiple jobholders help to explain some of the difference in employment growth as measured by the household and payroll surveys

John F. Stinson, Jr.

How many people in the United States hold more than one job? Are their numbers growing or shrinking? What kind of work are they doing on their second job? Also, what implications do changes in the number of multiple jobholders have on measuring employment growth? The answers to these questions and more are now provided on a regular basis, from data collected since 1994 in the Current Population Survey (CPS), a monthly sample survey of 50,000 households.

When a major redesign of the CPS was introduced in January 1994, its primary aim was to improve the quality of the data derived from the survey by introducing a new questionnaire and modernized data collection methods.[1] A major secondary intent of the redesign was to provide additional data series, one of which is regular monthly estimates of the number of multiple jobholders. Previously, these data had been collected only through special periodic supplements to the CPS in May of various years.[2]

This article first looks at how the data on multiple jobholders now are obtained from CPS questions and how such workers are defined. It then provides some historical perspective on moonlighting by examining trends from the data collected in the May supplements. Next, it examines the work schedules and the demographic, industrial, and occupational characteristics of moonlighters from the new CPS data. Finally, it examines the data to see what effect changes in the number of multiple jobholders have on measuring employment growth.

John F. Stinson, Jr. is an economist in the Office of Employment and Unemployment Statistics, Bureau of Labor Statistics.

Who are multiple jobholders?

Multiple jobholders are identified in the CPS from the response to the question, "LAST WEEK, did you have more than one job (or business), including part-time, evening, or weekend work?"[3] This question is asked of all CPS respondents each month who report that they had done some work. If they answer yes, additional questions are asked on how many jobs (or businesses) they had altogether and how many hours they worked per week at all their other jobs. Further questions on the class of worker, industry, and occupation of the second job are also asked of a quarter-sample of the CPS respondents each month.[4]

In the CPS, a multiple jobholder is defined as a person who responds affirmatively to the initial question stated earlier and, (1) had a job as a wage and salary worker with two employers or more, (2) combined a wage and salary job with self-employment, or (3) combined a wage and salary job with one as an unpaid family worker. Persons with two self-employed jobs and persons who were self-employed or unpaid family workers on their primary jobs and held a secondary job as an unpaid family worker are excluded from the count of multiple jobholders. The primary job

is defined as the one at which the greatest number of hours were worked.

Historical trends in multiple jobholding

It is difficult to establish strict comparability between the multiple jobholding data from the May supplements and the data now collected monthly in the CPS. However, a look back at the May data is helpful to establish some historical trends in moonlighting. These data show that as the U.S. economy expanded vigorously after the recessions of the early 1980s, many Americans took advantage of the rising demand for labor by taking on a second job. Spurred by the growing availability of jobs or driven by the desire to meet economic needs, multiple jobholding rose to unprecedented numbers before leveling off at the beginning of the 1990s. The May 1989 and 1991 data showed that 7.2 million persons held two jobs or more—an increase of 1.5 million or about 25 percent from 1985 and about 2.5 million, or around 50 percent since 1980. (See table 1.) With these increases, the multiple jobholding rate—the proportion of all employed persons with two jobs or more—reached 6.2 percent in 1989 and remained at that level in 1991. It was up from 5.4 percent in 1985 and 4.9 percent in 1980.

The rapid growth in multiple jobholding in the 1980s followed a period of stability in the 1970s when the number of multiple jobholders grew at about the same pace as total employment, with the multiple jobholding rate holding around 5 percent. This stability, however, masked some important changes that were occurring in the composition of multiple jobholders, as declines in the incidence of moonlighting by men were being offset by rapid increases among women. Between 1970 and 1980, the multiple jobholding rate for men fell from 7.0 percent to 5.8 percent and the number of male moonlighters edged down from 3.4 million to 3.2 million. Over the same time span, the moonlighting rate for women rose from 2.2 to 3.8 percent, as the number who held more than one job increased from around 600,000 to more than 1.5 million. The growth in multiple jobholding by women accelerated sharply in the 1980s. Their number doubled to 3.1 million in 1989 and their multiple jobholding rate increased by 2.1 percentage points to 5.9 percent. The rate for men, after holding steady at 5.9 percent in 1985, rose to 6.4 percent in 1989. The rates for both men and women were unchanged in 1991. (See table 1.)

Demographic characteristics

The new data on multiple jobholding show that, in 1996, the number of persons holding more than one job averaged 7.8 million and the multiple jobholding rate was 6.2 percent. These figures were up from 7.3 million and 5.9 percent in

Table 1. Multiple jobholders and multiple jobholding rates by selected characteristics, May, selected years, 1970–91

[Numbers in thousands]

Year	Total employed	Multiple jobholders				Multiple jobholders rate [1]				
		Total	Men	Women		Total	Men	Women	White	Black [2]
				Number	Percent of all multiple jobholders					
1970	78,358	4,048	3,412	636	15.7	5.2	7.0	2.2	5.3	4.4
1971	78,708	4,035	3,270	765	19.0	5.1	6.7	2.6	5.3	3.8
1972	81,224	3,770	3,035	735	19.5	4.6	6.0	2.4	4.8	3.7
1973	83,758	4,262	3,393	869	20.4	5.1	6.6	2.7	5.1	4.7
1974	85,786	3,889	3,022	867	22.3	4.5	5.8	2.6	4.6	3.8
1975	84,146	3,918	2,962	956	24.4	4.7	5.8	2.9	4.8	3.7
1976	87,278	3,948	3,037	911	23.1	4.5	5.8	2.6	4.7	2.8
1977	90,482	4,558	3,317	1,241	27.2	5.0	6.2	3.4	5.3	2.6
1978	93,904	4,493	3,212	1,281	28.5	4.8	5.8	3.3	5.0	3.1
1979	96,327	4,724	3,317	1,407	29.8	4.9	5.9	3.5	5.1	3.0
1980	96,809	4,759	3,210	1,549	32.5	4.9	5.8	3.8	5.1	3.2
1985	106,878	5,730	3,537	2,192	38.3	5.4	5.9	4.7	5.7	3.2
1989	117,084	7,225	4,115	3,109	43.0	6.2	6.4	5.9	6.5	4.3
1991	116,626	7,183	4,054	3,129	43.6	6.2	6.4	5.9	6.4	4.9

[1] Multiple jobholders as a percent of all employed persons in specified group.

[2] Data for years prior to 1977 refer to the black-and-other population group.

NOTE: Data prior to 1985 reflect 1970 census-based population controls; for 1985–91, 1980 census-based population controls.

Comprehensive surveys of multiple jobholders were not conducted in 1981–84, 1986–88, and 1990.

Table 2. **Multiple jobholders by age, marital status, race, Hispanic origin, and sex, 1996 annual averages**

[Numbers in thousands]

Characteristic	Both sexes			Men			Women		
	Total employed	Multiple jobholders		Total employed	Multiple jobholders		Total employed	Multiple jobholders	
		Number	Rate[1]		Number	Rate[1]		Number	Rate[1]
Age									
Total, 16 years and older	126,708	7,832	6.2	68,207	4,192	6.1	58,501	3,640	6.2
16 to 19 years	6,500	336	5.2	3,310	146	4.4	3,190	190	5.9
20 to 24 years	12,138	813	6.7	6,429	392	6.1	5,709	421	7.4
25 to 34 years	32,077	2,070	6.5	17,527	1,152	6.6	14,549	918	6.3
35 to 44 years	35,051	2,274	6.5	18,816	1,219	6.5	16,235	1,055	6.5
45 to 54 years	25,514	1,658	6.5	13,483	878	6.5	12,031	780	6.5
55 to 64 years	11,739	556	4.7	6,470	321	5.0	5,269	235	4.5
65 years and older	3,690	126	3.4	2,172	84	3.9	1,518	42	2.7
Marital status									
Single	32,458	2,080	6.4	18,055	1,040	5.8	14,403	1,040	7.2
Married, spouse present	74,824	4,471	6.0	42,417	2,696	6.4	32,406	1,775	5.5
Widowed, divorced, or separated	19,426	1,281	6.6	7,735	456	5.9	11,691	825	7.1
Race and Hispanic origin									
White	107,808	6,867	6.4	58,888	3,686	6.3	48,920	3,181	6.5
Black	13,542	705	5.2	6,456	376	5.8	7,086	329	4.6
Hispanic origin	11,642	442	3.8	7,039	254	3.6	4,602	188	4.1

[1] Multiple jobholders as a percent of all employed persons in specified group.

NOTE: Detail for race and Hispanic-origin groups will not add to totals because data for the "other races" group are not presented and Hispanics are included in both the white and black population groups.

1994. The data also show that the incidence of multiple jobholding is now virtually the same among both men and women. The 1996 multiple jobholding rate for women, 6.2 percent, was actually marginally higher than the 6.1-percent rate for men. Both of these rates were up from 5.9 percent in 1994. Men still outnumber women slightly in terms of the absolute numbers of multiple jobholders. Women comprised 47 percent of all multiple jobholders in 1996.

Among men, the highest multiple jobholding rate (6.6 percent in 1996) was among those in the 25- to 34-year age group. For women, the highest rate (7.4 percent) was for those aged 20 to 24 years. Among men, married men were the most likely to work at more than one job, while married women were somewhat less likely to do so than were women without a spouse. Both single and widowed, divorced, or separated women had high rates of multiple jobholding, compared with their male counterparts. (See table 2.)

Moonlighting was most prevalent among whites, who had a multiple jobholding rate of 6.4 percent in 1996. The rate for blacks was 5.2 percent, compared with a 3.8-percent rate for persons of Hispanic origin.

Industry and occupation

The highest rates of multiple jobholding in 1996 were for workers whose primary jobs were in public administration (8.1 percent) and in the services industry (7.5 percent), especially educational services (9.9 percent).

Among the major occupational groups, professional specialty workers had the highest rate of holding multiple jobs. Within that group, high rates of moonlighting were reported by teachers in colleges and universities as well as those in elementary and secondary schools and workers employed in health assessment and treating occupations—of which registered nurses make up the largest share. A high incidence of multiple jobholding also was found among protective service workers—a group that includes police, who frequently moonlight as guards or security personnel, and firefighters—whose work schedules with long periods of time on and then off the job may give them good opportunities to work at second jobs. (See the accompanying article by Thomas Amirault on page 9 for a detailed breakdown of multiple jobholding in terms of industry and occupation.)

About one-fourth of the moonlighters were self-employed on their secondary jobs in 1996.[5] Almost three-quarters of the multiple jobholders held second jobs as wage and salary workers, with 35 percent of them holding a second job in the services industry, principally in professional services, and 20 percent working in retail trade. Almost a third of the men were self-employed on their secondary job and 45 percent had second jobs as wage and salary workers in the services (29 percent) and retail trade industries (16 percent). By con-

trast, 21 percent of women were self-employed on their secondary jobs and two-thirds of those who moonlighted held wage and salary jobs in services and retail trade. (See table 3.)

Work schedules

Although the proportions of men and women working at more than one job are now about the same, significant differences remain in the types of jobs they hold and the hours spent on these jobs. About two-thirds of the men who held multiple jobs in 1996 usually worked full time on their primary job and part time on their secondary job.[6] Thirteen percent usually worked part time on all their jobs and about 4 percent usually worked full time on both their primary and secondary jobs. Another 20 percent of the men had variable hours on either their primary or secondary jobs. Men who held more than one job worked an average of 52 hours per week at all of their jobs combined. (See table 4.)

In contrast, one-third of the women holding more than one job worked at multiple part-time jobs, while one-half usually worked full time on their primary and part time on their secondary jobs. Just 2 percent of women moonlighters had two full-time jobs and about 17 percent had variable hours on either job. The women who worked more than one job averaged 43 hours per week at all of their jobs.

While blacks and Hispanics were less likely than whites to be moonlighters, those who did hold more than one job worked longer hours and were more likely to combine a full- and a part-time job or two full-time jobs than were their white counterparts. (See table 4.)

Multiple jobholding and employment growth

The availability of timely data on multiple jobholding is a valuable tool in reconciling employment estimates from the CPS with those from the monthly Current Employment Statistics (CES) program, a payroll survey of nonfarm business establishments. The employment data derived from these two sources differ because of variations in definitions and coverage, sources of information, methods of collection, and esti-

Table 3. Multiple jobholders by industry and class of worker of principal secondary job and sex, 1996 annual averages

[Percent distribution]

Industry and class of worker of secondary job	Total	Men	Women
Total, 16 years and older	100.0	100.0	100.0
Agriculture.	7.6	10.6	4.3
Wage and salary workers	1.7	2.3	1.1
Self-employed workers	5.6	8.0	2.9
Unpaid family workers	.3	.2	.3
Nonagricultural industries	92.4	89.4	95.7
Wage and salary workers	71.3	65.7	77.8
Mining.	.0	.0	.0
Construction	1.9	2.6	1.0
Manufacturing	3.8	4.6	3.0
Durable goods	1.3	1.8	.8
Nondurable goods	2.5	2.8	2.2
Transportation and public utilities	3.9	5.4	2.2
Transportation	3.1	4.3	1.8
Communication and other public utilities	.7	1.0	.4
Wholesale trade	1.7	1.8	1.6
Retail trade.	19.9	15.8	24.6
Finance, insurance, and real estate	2.9	3.1	2.7
Service industries	34.5	28.9	40.9
Professional services	21.1	16.1	26.7
Other service industries	13.4	12.7	14.2
Public administration.	2.8	3.6	1.8
Self-employed workers	20.7	23.5	17.6
Unpaid family workers	.3	.2	.3

Table 4. Multiple jobholders by sex, race, Hispanic origin, work schedules, and hours of work on primary and secondary jobs, 1996 annual averages

Characteristic	Total multiple jobholders (in thousands)	Percent distribution					Average hours		
		Total	Usually full time on primary job, part time on secondary job(s)	Usually part time on primary and secondary job(s)	Usually full time on primary and secondary job(s)	Hours vary	All jobs	Primary job	Secondary jobs(s)
Total	7,832	100.0	55.9	21.9	3.1	18.6	47.8	34.8	13.0
Men	4,192	100.0	62.2	12.7	4.2	20.4	52.0	38.1	13.9
Women	3,640	100.0	48.7	32.5	1.9	16.5	43.0	31.0	12.0
White	6,867	100.0	55.1	22.8	2.7	18.9	47.4	34.7	12.7
Black	705	100.0	62.0	14.8	6	16.5	51.6	35.9	15.8
Hispanic	442	100.0	62.7	20.6	5	10.9	50.5	35.4	15.2

NOTE: The total includes a small number of persons who work part time on their primary jc ; l full time on their secondary job(s), not shown separately.

Table 5. Changes in employment levels based on the payroll and household surveys, 1994–96 annual averages

[In thousands]

Employment series	1994	1996	Change
Nonfarm payroll employment	114,172	119,554	5,382
Total employment (household survey)	123,060	126,708	3,648
Less:			
Agriculture	3,409	3,443	34
Nonagricultural self-employed	9,003	8,971	–32
Nonagricultural unpaid family workers	131	122	–9
Private household workers	966	928	–38
Unpaid absences	1,991	2,076	85
Total	15,500	15,540	40
Plus:			
Agricultural services	716	801	85
Multiple jobholders[1]	4,516	4,937	421
Total	5,232	5,738	506
Adjusted household survey employment	112,792	116,906	4,114

[1] Multiple jobholders who are nonagricultural wage and salary workers on both their primary and secondary jobs.

mating procedures. Sampling variability and response errors are additional reasons for discrepancies. Another important difference is how multiple jobholders are treated in the two employment series.[7] In the household survey, employed persons holding more than one job are counted only once, at the job at which they worked the greatest number of hours (the "primary job") during the survey reference week. In the payroll survey, however, persons with a nonfarm wage and salary job are counted as many times as their names show up on a payroll record. An increase in the number of persons holding more than one nonagricultural wage and salary job would therefore cause employment estimates from the payroll survey to show a faster rate of growth than would be evident in the household survey.

Because of the differences in the two surveys, the employment growth recorded by them is not always in agreement. For example, between 1994 and 1996, on an annual average basis, the payroll survey showed a gain of 5.4 million, compared to an increase of about 3.6 million in the household survey, a difference of about 1.7 million. (See table 5.) However, when adjustments are made to the CPS employment data, such as removing the agricultural, self-employed, and private household workers (all of whom are excluded from the payroll survey) and adding estimates of those employed in agricultural services and those who hold multiple jobs[8] (groups who would be included in the payroll employment estimate), the difference in employment growth between the two surveys is reduced to about 1.3 million. The adjustment for multiple jobholders (whose numbers rose by 421,000 between 1994 and 1996) by itself accounted for 90 percent of the reduction in the employment growth differential.

BEFORE 1994, data on multiple jobholding were collected infrequently, making it difficult to estimate the extent to which changes in multiple jobholding contributed to the differences in employment growth between the household and payroll employment series. The availability of these data on a regular basis since 1994 has provided additional insight into interpreting employment growth trends. □

Footnotes

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[1] For a complete description of the changes in the CPS, see Sharon R. Cohany, Anne E. Polivka, and Jennifer M. Rothgeb, "Revisions in the Current Population Survey Effective January 1994," *Employment and Earnings*, February 1994, pp. 13–37.

[2] Prior to 1980, data on multiple jobholding were collected annually each May. After 1980, the data were collected in May of 1985, 1989, and 1991. For an analysis of recent data on multiple jobholding collected in the May CPS supplements, see "Multiple jobholding unchanged in May 1991," *Bureau of Labor Statistics News*, USDL 91-547 (U.S. Department of Labor), Oct. 28,1991; and John F. Stinson, Jr., "Multiple jobholding up sharply in the 1980's," *Monthly Labor Review*, July 1990, pp. 3–10.

[3] This question differs from the one used in the May CPS supplements. In the supplements, the principal questions used were: "LAST WEEK, in addition to the job with (the job reported on the regular CPS questionnaire), did ... do any paid work for any (other) employers?" and "LAST WEEK, in addition to the job with (the job reported on the regular CPS questionnaire), did ... operate ...'s own (another) business, profession, or farm?" Because of the different questions used in the supplements, their May collection period, and the most recent data being available only for 1991, comparability between the currently collected data and those collected in the supplements cannot be determined. However, the characteristics of multiple jobholders from both sources are very similar.

[4] Because the data on the class of worker, industry, and occupation of the second job are collected from a quarter-sample of CPS respondents, they are compiled only on a quarterly and annual basis.

[5] For workers who held more than two jobs, the information on the industry, occupation, and class of worker of their second job is collected only for the job at which they worked the second most number of hours. The data on hours worked, however, refer to the hours of work on all jobs if more than two jobs were held.

[6] A full-time job is one in which a person usually works 35 hours or more per week and a part-time job is one in which a person usually works less than 35 hours per week.

[7] For discussions of the role that multiple jobholding can play in the differences in employment growth registered by the two surveys, see Stinson, "Multiple jobholding up sharply;" Paul O. Flaim,"How many new jobs since

1982? data from two surveys differ," *Monthly Labor Review*, August 1989, pp. 10–15; John F. Stinson, Jr., "Moonlighting: a key to differences in measuring employment growth," *Monthly Labor Review*, February 1987, pp. 30–31; and Gloria P. Green, "Comparing employment estimates from household and payroll surveys," *Monthly Labor Review*, December 1969, pp. 9–20.

[8] The multiple jobholding data used in this analysis refer to nonagricultural wage and salary workers on both their primary and secondary jobs. Those multiple jobholders who were self-employed or worked in agriculture on either their primary or secondary job would not be counted twice in the payroll survey because its universe is restricted to nonfarm wage and salary jobs.

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Characteristics of multiple jobholders, 1995

Data from the Current Population Survey indicate that relatively well paid, highly educated persons have more than one job because their schedule allows it, because their expertise is in demand, or because their financial reasons extend beyond meeting basic living expenses and paying off debts

Thomas Amirault

According to the 1995 Current Population Survey (CPS), 7.9 million persons,[1] or 6.3 percent of all employed workers, held more than one job. Why do people work at more than one job? The motive that first comes to mind for most people is financial necessity—that they need the earnings from more than one job to meet basic living expenses. Past CPS supplements to the May questionnaires asked multiple jobholders about their reasons for working multiple jobs. While their responses included: paying off debts, meeting current expenses, saving for the future, getting experience, building up a business, or other reasons, the surveys showed that they cited financial reasons[2] for working more than one job 37 percent of the time in 1979 and 44 percent of the time in 1989.[3] Questions concerning motivation for additional work were not asked as part of the 1995 CPS, but examination of the data reveals that nonfinancial motivators may be at least as strong as financial motivators when it comes to reasons for working more than one job.

This article examines the educational attainment, earnings, occupations, and industries of employment of persons who held more than one job in 1995. For that year, the multiple jobholding rate was consistent with long term trends.[4] Those trends, as well as trends in multiple jobholding by age, sex, race, marital status, and class of worker are explored in an article by John F. Stinson elsewhere in this issue.

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Multiple jobholders are significant to the analysis of the labor market because they add several million jobs to the economy. Moreover, analysis of multiple jobholders by educational attainment and earnings has produced some interesting results. The percentage of workers holding multiple jobs increased with education and remained stable over earnings classes. While earnings and education are somewhat related, one would expect that as the earnings received from the primary job increased, the motivation to work an additional job for financial reasons would decrease. Although financial and nonfinancial reasons for multiple jobholding surely exist at all earnings and education levels, there may be a shift in the relative importance of reasons for multiple jobholding from financial to nonfinancial as one ascends the earnings/education ladder.

Education

As stated earlier, the tendency to work multiple jobs increases with education. Three percent of workers with less than a high school education had more than one job, compared with nearly 10 percent of workers holding a Ph.D. The only exception to this trend is for those with professional degrees (for example, physicians and lawyers), who have a rate lower than that of all other college graduates.

Table 1. Multiple jobholders by educational attainment, 1995 annual averages

[Numbers in thousands]

Educational attainment	Total employed	Multiple jobholders	Percent
Total, all employed	125,004	7,924	6.3
Less than high school	15,968	519	3.3
High school graduate or equivalent	40,821	2,077	5.1
Some college, no degree	26,101	1,940	7.4
Associate's degree	10,096	793	7.9
Bachelor's degree	21,470	1,683	7.8
Master's degree	7,109	648	9.1
Professional degree	2,036	132	6.5
Ph.D.	1,402	132	9.4

Table 2. Wage and salary workers holding multiple jobs, by earnings quintile of primary job, 1995 annual averages

Weekly earnings quintile	Total wage and salary workers		
	Employment	Multiple jobholders	Percent
1st ($0 – $210)	22,838	1,462	6.4
2nd ($211– $333)	21,017	1,295	6.2
3rd ($334 – $493)	22,354	1,354	6.1
4th ($494 – $730)	21,605	1,297	6.0
5th ($731 and over)	21,818	1,288	5.9

Persons who have taken the time to get an education, presumably to increase their knowledge and earnings potential, may benefit from their effort in terms of marketability for secondary jobs. (See table 1.) Workers with more education may have financial reasons for working more than one job. However, nonfinancial reasons may strongly influence their multiple jobholding. Beyond gaining experience, their main occupation might have a schedule that permits multiple jobs and they might have skills or knowledge in sufficient demand to cause employers to seek their expertise even though they are already employed.

Earnings

Data on multiple jobholders by earnings indicate that the percentage of workers with multiple jobs declines only slightly as earnings increase. (See table 2.) (The CPS collects earnings information for only the job at which a person worked the longest hours in a reference week. Also, earnings data are collected from wage and salary workers only.) If the primary motivation to have more than one job was "to meet basic living expenses," one would expect to see a far sharper decline as weekly earnings decreased. However, this does not happen. The stability over the weekly earnings quintiles is attributed to the large number of relatively well paid people who work second jobs because their schedule allows it, because their expertise is in demand, or because of financial reasons beyond meeting basic living expenses and paying off debts.

Occupation

Those holding primary jobs in professional specialty, technician, and service occupations were the most likely to hold more than one job and also to have the greatest number of multiple jobholders. (See table 3.) Many professional specialty occupations, such as college faculty, elementary and secondary school teachers, and registered nurses, have work schedules (such as predictable or flexible work hours or considerable time off) that would allow for second jobs. The same is true for health technologists and technicians, and for service occupations such as firefighters and police.

Extending the traditional view of multiple jobholding as a function of earnings to occupations, one would expect persons in high earning occupations to be least likely to have more than one job, compared with those in low earnings occupations. Also, one would expect persons with one job to earn more in their primary job than what multiple jobholders earn

Table 3. Comparison of single and multiple jobholders by median earnings and occupational group of primary job, 1995 annual averages

Occupational group of primary job	Number of multiple jobholders	Percent	Median primary job earnings		
			Single jobholders	Multiple jobholders	Dollar difference
Total employed	7,924	6.3	$407	$400	$7
Executive, administrative, and managerial	1,072	6.2	659	607	52
Professional specialty	1,648	9.1	654	604	50
Technicans and related support	301	7.7	511	456	55
Sales	867	5.7	322	285	37
Administrative support, including clerical	1,188	6.5	354	325	29
Private household workers	51	6.1	130	161	–31
Service workers, except private household	1,152	7.1	228	268	–40
Farming, forestry, and fishing	191	5.2	256	296	–40
Precision production, craft, and repair	633	4.7	507	506	1
Machine operators, assemblers, and inspectors	327	4.1	352	381	–29
Transportation and material moving occupations	263	5.1	434	366	68
Handlers, equipment cleaners, helpers, and laborers	230	4.6	277	277	0.0

in their primary job. Table 3 shows that this is not necessarily the case. While weekly earnings in primary jobs for single jobholders were $7 higher than those of multiple jobholders for all occupations, single jobholders earned more than multiple jobholders in 7 of the 12 of the occupational groups. Professionals had the second highest primary-job median earnings and the highest multiple jobholding rate; they are easily able to supplement their primary incomes in well paying consultant and teaching occupations. On the surface, multiple jobholders in services appear to follow the conventional assumption that persons in low paying occupations have two jobs. But the multiple jobholding rate of the service group is dominated by relatively well paid protective services workers such as police and firefighters. The high rate of multiple jobholding for technicians is driven by the demand for health-related technicians, such as licensed practical nurses. In general, the data indicate that an occupational pattern of multiple jobholding exists that is driven more by the opportunities that highly trained and educated workers have to obtain additional jobs than by a need for earnings to meet basic living expenses.

Occupations with more than 100,000 persons working secondary jobs include many that one would expect to find (such as writers, artists, waiters, and waitresses), as well as those in which workers often have schedules that permit other jobs, such as elementary and secondary school teachers, college and university faculty, police and detectives, and registered nurses. Some of the other occupations listed in table 4 have low median earnings that might cause individuals to seek supplemental work to support a family, such as waiters and waitresses and retail sales occupations. Persons in construction trades may find that additional work is easy to find because of the seasonal and cyclical nature of the construction industry. The 23 occupations listed in table 4 account for 48 percent of all multiple jobholders.

Certain occupations contain a large proportion of workers who have secondary jobs. (See table 5.) Workers in these occupations totaled slightly more than 13 percent of all multiple jobholders. The list in table 5 in-

Table 4. Primary occupations with more than 100,000 workers holding multiple jobs, 1995 annual averages

Primary occupation	Employment 1995	Number	Percent
Salesworkers, retail and personal services	6,608	400	6.1
Supervisors and proprietors, sales occupations	4,494	230	5.1
Mechanics and repairers	4,426	224	5.1
Motor vehicle operators	3,915	213	5.4
Construction trades	5,116	213	4.2
Secretaries	3,365	201	6.0
Writers, artists, entertainers, and athletes	2,061	191	9.3
Registered nurses	1,978	189	9.6
Teachers, secondary school	1,234	164	13.3
Teachers, elementary school	1,745	154	8.8
Sales representatives, finance and business services	2,399	151	6.3
Health technologists and technicians	1,650	151	9.1
Truck drivers	2,872	137	4.8
Social, recreation, and religious workers	1,305	130	10.0
Janitors and cleaners	2,067	123	6.0
Cooks	2,001	123	6.1
Waiters and waitresses	1,424	122	8.6
Nursing aides, orderlies, and attendants	1,765	120	6.8
Teachers, college and university	843	119	14.1
Bookkeepers, accounting, and auditing clerks	1,773	115	6.5
Accountants and auditors	1,520	113	7.5
Engineers	1,932	108	5.6

Table 5. Primary occupations in which more than 10 percent of persons work multiple jobs, 1995 annual averages

Primary occupation	Employment 1995	Number	Percent
Firefighting occupations	237	67	28.1
Physicians assistants	55	13	23.4
Announcers	50	10	19.3
Artists, performers, and related workers, n.e.c.	103	17	16.0
Psychologists	260	41	15.6
Therapists	466	67	14.5
Dental hygienists	95	14	14.4
Teachers, college and university	843	119	14.1
Teachers, secondary school	1,234	164	13.3
Musicians and composers	162	21	13.0
News vendors	116	14	12.3
Actors and directors	115	14	11.8
Teachers, n.e.c.	727	85	11.7
Supervisors, police and detectives	103	12	11.7
Hotel clerks	101	12	11.4
Administrators, protective services	57	6	10.9
Police and detectives	940	102	10.8
Dietitians	95	10	10.8
Bartenders	287	31	10.6
Veterinarians	59	6	10.2
Editors and reporters	271	27	10.0
Managers, service organizations, n.e.c.	631	63	10.0
Social, recreation, and religious workers	1,305	130	10.0
Pharmacists	170	17	10.0

n.e.c.= not elsewhere classified.

cludes many occupations that are traditionally considered to be hard to break into and make a living in, such as acting and music, and that often require earnings from a second job to meet living expenses. Although many other occupations on the list, such as teachers, firefighters, protective service occupations, and psychologists generally are paid more than the median for all workers, the occupational work schedule allows for additional jobs. In other occupations such as dental hygienist, therapist, and psychologist, the job market is open to workers who hold more than one job.

Industry

Many of the industries with the highest percentages or greatest numbers of working multiple jobholders are related to many of the occupations discussed earlier. However, industry data on multiple jobholding show considerably less variation than what occupational data revealed. (See table 6.) Industries with significantly higher rates of multiple jobholding tend to be in the service and public administration sectors. The industries associated with educational services and justice, public order, and safety administration have the highest rates, because of the high concentration of teachers and protective service personnel they employ.

Types of secondary jobs

Are workers able to use their primary job skills in their secondary occupation? The association between the primary and secondary occupation is an important aspect of multiple jobholding to labor market analysts.[5] In table 7, the distribution of secondary jobs is shown for each primary occupation group across each row. For example, 53 percent of those who were professionals in their primary job worked in professional specialty occupations in their secondary jobs also, while less than 2 percent had secondary jobs as technicians. In 7 out of 12 occupational groups, the secondary job was most often in the same occupational group as the first. This attachment of primary and secondary jobs was strongest in the professional specialty (53 percent); service, except private household (45 percent); and sales (28 percent) occupational groups.

A significant pattern appears when we examine employ-

Table 6. Multiple jobholders by industry of primary job, 1995 CPS annual averages

[Number in thousands]

Industry of primary job	Employment 1995	Multiple jobholders	
		Number	Percent
Total, all industries	125,004	7,924	6.3
Agriculture, forestry, and fisheries	3,619	189	5.2
Mining		32	5.2
Construction	7,686	337	4.4
Manufacturing	20,512	984	4.8
Durable goods	12,037	597	5.0
Lumber and wood products, except furniture	817	36	4.4
Furniture and fixtures	643	24	3.7
Stone, clay, glass, and concrete products	588	31	5.2
Metal industries	2,120	111	5.2
Machinery and computing equipment	2,406	142	5.9
Electrical machinery, equipment, and supplies	1,857	88	4.7
Transportation equipment	2,211	96	4.3
Professional and photographic equipment, and watches	735	40	5.5
Toys, amusement, and sporting goods	174	8	4.4
Nondurable goods	8,475	386	4.6
Food and kindred products	1,703	79	4.6
Tobacco manufactures	53	3	6.6
Textile mill products	672	23	3.5
Paper and allied products	721	31	4.2
Chemicals and allied products	1,293	55	4.3
Petroleum and coal products	183	7	4.0
Rubber and miscellaneous plastics products	833	36	4.3
Leather and leather products	143	3	2.2
Transportation, communications, and other public utilities	8,698	511	5.9
Transportation	5,575	318	5.7
Communications	1,609	99	6.1
Utilities and sanitary services	1,513	94	6.2
Wholesale trade	4,996	271	5.4
Retail trade	21,094	1,247	5.9
Finance, insurance, and real estate	7,968	479	6.0
Services	43,877	3,329	7.6
Business and repair services	7,537	407	5.4
Personal services	4,395	253	5.8
Entertainment and recreation services	2,248	183	8.1
Professional and related services	29,697	2,486	8.4
Health services, except hospitals	5,984	440	8.4
Hospitals	4,956	418	8.4
Legal services	1,333	68	5.1
Educational services	9,915	1,007	10.2
Social services	2,991	242	8.1
Membership organizations	1,406	129	9.2
Engineering and management services	2,824	165	5.8
Public administration	5,934	547	9.2
Justice, public order, and safety	2,288	272	11.9

Table 7. Distribution of the secondary jobs of multiple jobholders by occupational group of primary job, and employment in secondary jobs by occupational group, 1995 CPS annual averages

Occupation of primary job	Occupation of secondary job						
	Total employed (thousands)		Executive administrative and managerial	Professional specialty	Technician and related support	Sales	Administrative support
	Number	Percent					
Total employed	7,413	100.0	9.7	20.3	2.5	17.9	9.7
Executive, administrative, and managerial	1,024	100.0	22.2	18.8	1.7	22.0	10.1
Professional specialty	1,540	100.0	9.5	53.3	2.2	11.6	5.6
Technician and related support	281	100.0	7.2	14.5	25.7	14.9	10.7
Sales	833	100.0	10.9	14.5	0.9	28.0	10.0
Administrative support	1,119	100.0	6.7	10.4	1.3	26.6	23.4
Private household	41	100.0	1.9	7.3	0.0	9.3	14.6
Service, except private household	1,063	100.0	5.0	8.0	2.0	13.0	6.2
Farming, forestry, and fishing	168	100.0	8.1	7.4	0.9	12.4	9.9
Precision production, craft, and repair	597	100.0	9.5	10.6	1.2	14.6	3.3
Machine operators, assemblers, and inspectors	300	100.0	4.6	7.5	1.5	14.5	5.2
Transportation and material moving	230	100.0	6.0	5.4	1.0	11.8	5.1
Handlers, equipment handlers, and laborers	217	100.0	2.9	6.6	2.0	13.3	7.1
Number of secondary jobs[1]	7,413	...	719	1,504	187	1,325	717
Percent additional jobs[2]	...	...	4.0	7.7	4.6	8.1	3.8

Occupation of primary job	Private Households	Service, except private household	Farming, forestry, and fishing	Precision production, craft, and repair	Machine operators, assemblers, and inspectors	Transportation and material moving	Handlers, equipment handlers, and laborers
Total employed	1.0	18.5	7.5	5.3	1.8	3.2	2.6
Executive, administrative, and managerial	0.2	10.2	7.5	3.2	1.3	1.5	1.1
Professional specialty	0.6	7.7	4.7	2.5	0.7	1.1	0.6
Technician and related support	0.0	13.7	5.4	4.5	1.2	1.3	1.0
Sales	1.3	17.2	5.9	3.4	1.9	2.8	3.3
Administrative support	0.7	18.6	3.9	2.1	1.4	2.9	1.8
Private household	14.0	38.4	4.2	3.3	5.3	1.7	0.0
Service, except private household	2.6	45.2	4.4	4.5	2.0	3.2	3.7
Farming, forestry, and fishing	1.4	13.3	20.3	5.5	2.2	12.3	6.3
Precision production, craft, and repair	0.5	12.3	14.5	21.6	4.0	3.5	4.5
Machine operators, assemblers, and inspectors	0.4	25.9	16.2	9.7	4.9	5.7	3.7
Transportation and material moving	0.0	18.3	20.5	8.2	1.6	16.8	5.3
Handlers, equipment handlers, and laborers	1.5	21.9	15.6	10.0	2.9	5.8	10.4
Number of secondary jobs[1]	73	1,372	556	393	134	238	194
Percent additional jobs[2]	8.1	7.8	13.2	2.8	1.7	4.4	3.8

[1]This category represents the number of persons working secondary jobs in a particular occupational group.

[2]This is the percentage increase in the total number of jobs when secondary jobs are added to primary jobs in an occupational group.

ment in secondary jobs for the top three occupational groups. Professional specialty occupations are the most numerous secondary jobs because of the large number of professionals who apply their expertise as professionals outside their primary job. Service and sales occupations are the second and third largest secondary job groups because of the large numbers of workers of all backgrounds who seek secondary jobs in these two groups, and very likely because of the availability of part-time jobs in these occupations.

Effects on total employment

One of the reasons data on multiple jobholders is collected is to try to count the number of jobs in the economy more accu-

rately. According to 1995 CPS data, the number of persons with primary jobs is 125.0 million, the number of people working secondary jobs is 7.9 million, making the total number of jobs held about 132.9 million. This is 6.3 percent higher than regularly published employment numbers. However, the impact of multiple jobholding on each occupational group is quite different, as shown at the bottom of table 7. While the professional specialty occupation group has the largest number of additional jobs (1.5 million), secondary jobs have the greatest impact on the farming forestry, and fishing occupation group, where the 556,000 additional jobs increased the total number of jobs in this group by 13 percent.

Not surprisingly, retail sales is at the top of the list of occupations employing more than 100,000 people in secondary jobs, because many people supplement their earnings working part time at local stores. (See table 8.) Farming and farm work is a popular secondary job, probably because large numbers of smaller family farms cannot survive solely off the farm's earnings. Also, "weekend gardeners" tend to choose farming and farm work as a secondary job because they enjoy growing and selling the produce from their small plot. Many people with specialized expertise supplement their earnings by teaching adult education courses or teaching part time at a university. More than half of all employment in secondary jobs is accounted for by the occupations listed in table 8.

Among the 25 occupations employing the largest proportions of workers in a secondary job, virtually every "artistic" occupation appears. (See table 9.) For example, teachers, not elsewhere classified includes adult education teacher, tutors, part-time music teachers, and so forth—all areas with a large proportion of secondary jobs or part-time work. Similarly, artists, performers, and related workers not elsewhere classified, includes birthday

Table 8. Occupations employing more than 100,000 perjsons in secondary jobs, 1995 annual averages

Occupation	Primary job employment, 1995	Secondary job employment 1995	Percent in this occupation as a secondary job[1]
Salesworkers, retail and personal services	6,608	891	11.9
Farm operators and managers	1,453	381	20.8
Janitors and cleaners	2,067	275	11.7
Teachers, n.e.c.	727	220	23.3
Supervisors and proprietors, sales occupations	4,494	204	4.3
Street and door-to-door salesworkers	368	176	32.3
Waiters and waitresses	1,424	173	10.8
Sales representatives, finance and business services	2,399	166	6.5
Bookkeepers, accounting, and auditing clerks	1,773	164	8.5
Mechanics and repairers	4,426	163	3.6
Construction trades	,116	160	3.0
Teachers, college and university	843	151	15.1
Registered nurses	1,978	130	6.2
Nursing aides, orderlies, and attendants	1,765	127	6.7
Truck drivers	2,872	126	4.2
Social, recreation, and religious workers	1,305	125	8.7
Guards	844	123	12.7
Cooks	2,001	108	5.1
Secretaries, stenographers, and typists	4,102	107	2.6
Health technologists and technicians	1,650	106	6.1
Musicians and composers	162	103	39.0

[1] Calculated as: secondary job employment/(primary job employment plus secondary job employment).

Table 9. Occupations with more than 10 percent of all jobs held as secondary jobs, ranked by percent of secondary jobs, 1995 annual averages

(Numbers in thousands)

Occupation	Primary job employment, 1995	Secondary job employment 1995	Percent in this occupation as a secondary job[1]
Musicians and composers	162	103	39.0
News vendors	116	62	35.0
Athletes	87	46	34.4
Announcers	50	25	33.6
Street and door-to-door salesworkers	368	176	32.3
Teachers, n.e.c.	727	220	23.3
Artists, performers, and related workers, n.e.c.	103	30	22.8
Bartenders	287	81	22.0
Farm operators and managers	1,453	381	20.8
Authors	118	29	19.9
Small engine repairers	64	13	17.0
Psychologists	260	52	16.7
Religious workers, n.e.c.	111	21	15.9
Photographers	136	25	15.6
Teachers, college and university	843	151	15.1
Clergy	355	59	14.3
Demonstrators, promoters and models, sales	71	12	14.2
Guides	53	9	14.0
Managers, properties and real estate	527	82	13.4
Management analysts	316	46	12.7
Guards	844	123	12.7
Attendants, amusement and recreation facilities	195	26	11.9
Salesworkers, retail and personal services	6,608	891	11.9
Janitors and cleaners	2,067	275	11.7
Editors and reporters	271	35	11.4
Actors and directors	115	15	11.3
Animal caretakers, except farm	122	15	11.0
Waiters and waitresses	1,424	173	10.8
Physicians assistants	55	6	10.6
Therapists	466	54	10.4
Painters, sculptors, craft-artists, and artist printmakers	235	27	10.4
Bus drivers	527	61	10.4

n.e.c. = not elsewhere classified.

[1] Calculated as: secondary job employment/(primary job employment plus secondary job employment).

clowns, psychic readers, comedians, magicians, and so forth. Also, religious workers, not elsewhere classified includes Sunday school teachers, assistant ministers, faith healers, and so forth. Forty-five percent of secondary employment is accounted for by the occupations listed in table 9. A comparison of this table with table 5 shows that primary occupations are far more diverse than secondary occupations, meaning that people from a wide variety of primary occupations are targeting a smaller group of secondary occupations for additional employment. □

Footnotes

[1] This number does not agree with official data on multiple jobholding published in the January 1995 edition of Employment and Earnings because this analysis was carried out using public use Current Population Survey files and different estimating techniques.

[2] These include paying off debts, meeting regular household expenses, and saving for the future.

[3] John F. Stinson, "Multiple jobholding up sharply in the 1980's," *Monthly Labor Review*, July 1990, p. 4;

[4] Stinson, "Multiple jobholding," p. 5; and Edward S. Sekscenski, "Women's share of moonlighting nearly doubles during 1969–1979," *Monthly Labor Review*, May 1980, p. 38.

[5] The CPS collects occupational information for the first two jobs a person has, although the number of jobs a person may respond to as having is unlimited. Also, the occupation of a respondent's second job is only collected from outgoing rotation groups in the CPS sample, or approximately one-quarter of the sample. The resulting different weights applied to the responses to the questions, "Did you have more than one job?" and "What was the occupation of your second job?," causes the difference in the number of multiple jobholders (7,924) and the occupation-based total of secondary jobs (7,413).

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U.S. and German youths: unemployment and the transition from school to work

In Germany, a social consensus on the value of apprenticeship training results in low youth unemployment and a relatively easy transition from school to work; can the German model be adapted to the United States?

Robert J. Gitter and Markus Scheuer

Unemployment among young people is a serious problem facing the United States today. The labor market difficulties of youths cause the members of this cohort economic hardship now, as well as hinder their future economic success. Moreover, the difficulties youths face impinge on the Nation as a whole: a well-trained work force is vital to the U.S ability to compete in the international market as a high-productivity, high-wage country. Youths who gain work experience and receive on-the-job training will reduce both the chances of future labor bottlenecks and the burden that might be imposed on others to pay for their support.

It can be argued that U.S. youth unemployment results from inadequate labor market preparation in schools, as well as an especially difficult school-to-work transition for young Americans. The comprehensive German apprenticeship system is often seen as a model for an improved school-to-work transition. As James J. Heckman, Rebecca L. Roselius, and Jeffrey A. Smith state:[1]

> A new consensus has emerged in influential policy circles that the American labor market and educational system are unable to equip workers with sufficient skills. American youth are said to experience a disorderly transition from school to work characterized by too much job turnover and too little training on the job. In contrast, the German apprenticeship system has been held up as a model of order that produces smooth school to work transitions and provides workers with human capital directly related to their career interests in a format especially helpful for workers poorly served by formal schooling.

This article explores the school-to-work transition and youth unemployment in the two nations[2] and the lessons the United States might learn from Germany, but with an important cautionary note about the limited potential for transferring the German model. We begin with a discussion of some of the differences in the unemployment rates of various demographic and educational groups within the youth population of both countries. We then explore the reasons behind the lower German youth unemployment rates in terms of the vocational preparation of the two school systems and discuss the potential for transferring parts of the German model to the United States. We show that the key to Germany's success is the country's social consensus on the importance of work force training for youths. Whether Germany's methods could be successfully transferred is a direct function of another nation's likelihood of adopting such a social consensus.

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Youth unemployment

We define the youth unemployment rate as the unemployment rate for youths 16 to 24 years of age in the United States and 15 to 24 years in Germany; we define the overall unemployment rate as the rate for all individuals 16 years of age and older in the United States and 15 years and older in Germany. Substantial differences exist in the youth unemployment rates of Germany and the

Table 1. Youth unemployment in the United States and Germany, 1993

[In percent]

Age, sex, and race	United States	Germany
Unemployment rate		
Total, 15 or 16 years and older[1]	6.8	7.7
Total, 15/16–24[1]	13.4	7.7
Men	14.3	7.7
15/16–19[1]	20.4	5.4
20–24	11.3	8.6
Women	12.2	7.7
15/16–19[1]	17.4	5.3
20–24	9.6	8.5
White	11.2	—
Black	27.3	—
Other	13.3	—
15- or 16- to 24-year-olds[1]		
Proportion unemployed:		
Men	10.0	3.3
Women	7.6	3.7
Proportion unemployed long term:		
Men	1.1	1.1
Women	5	1.4
Proportion of total unemployment:		
Men	31.1	14.4
Women	31.1	15.2
Proportion in population 15/16–64:		
Men	19.3	14.4
Women	18.7	13.8

[1] Lower limit of 15 years for Germany and 16 years for the United States.

NOTE: Dash indicates data not differentiated by race because Germany has almost no races other than white.

SOURCE: U.S. data, *Employment and Earnings* (Department of Labor, January 1994); German data, EUROSTAT.

the United States. Table 1 presents a detailed comparison of youth unemployment in the two nations. The figures are for 1993, a year in which the overall U.S. unemployment rate was less than that of Germany.

In 1993, the youth unemployment rate in the United States was roughly double the overall unemployment rate, in direct contrast to Germany, where the youth unemployment rate was equal to the overall rate. The unemployment rate for U.S. youths 16 to 19 years of age was substantially higher than the comparable German rate, but there was a much smaller difference for 20- to 24-year-olds.[3] Thus, unemployment has a much younger face in the United States, with almost 1 in 3 unemployed Americans being between the ages of 16 and 24. The figure is only 1 in 7 for German youths between 15 and 24.[4]

Youth unemployment is most severe among minorities in the United States, where racial composition is more heterogeneous than in Germany. Black American youths had an unemployment rate of more than 27 percent in 1993, compared with 11.2 percent for white youths. Further, the group with the most labor market difficulty, 16- to 19-year-old black men, has an unemployment rate of 38.9 percent. Hence, to the extent that those youths who experience unemployment have less labor market success as adults, minority youths will experience disproportionately more labor market problems in the future.

Education and unemployment

The difference in unemployment rates between the two countries suggests that the initial entry of young workers into the labor force is more difficult in the United States than in Germany. To what extent this is related to the educational systems and levels of educational attainment of youths in the two nations may be gleaned from the following tabulation, which presents unemployment rates for youths 20 to 24 years of age, by educational attainment, in both countries in 1991:[5]

Education level	*United States*	*Germany*
Total	12.2	6.6
Less than secondary	21.8	10.1
Upper secondary	13.2	5.5
Postsecondary	5.9	5.9

Two important conclusions emerge from the data. First, in both nations, youths with less than a secondary education fare worse in the labor market than those who have completed their secondary schooling. Second, with the exception of those with a postsecondary education, the unemployment rates in the United States are more than double those in Germany for groups with a comparable level of education.

Not only do American youths with lower levels of education fare worse than their German counterparts, but also, they constitute a greater share of the youth cohort. The OECD study cited in footnote 4 showed that 16.6 percent of U.S. youths aged 20 to 24 had not completed a secondary education, much larger than the figure for the same group in Germany. Furthermore, only 36 percent of 20- to 24-year-olds in the United States were currently employed in the year they left school.[6] In short, U.S. youths without a secondary school diploma fare worse in the labor market than their German counterparts, and there are relatively more of them in the youth population.

U.S. and German educational systems

In light of the greater degree of difficulty in integrating youths into the labor force in the United States, an examination of the educational systems of the two countries might shed some light on the causes of this unemployment disparity. The curriculum of U.S. high schools can be divided into three broad categories: college preparatory, vocational, and general (defined by the U.S. Department of Education as a "program of studies designed to prepare students for the common activities of a citizen, family member, and worker").[7] For the most part, these categories can be found in high schools throughout the Nation. The following tabulation of the percentage of 17-year-olds in each of the three programs in 1982 and in

1990 reveals an increase in students electing the college preparatory curriculum, with a decline in the other two areas:[8]

Program	*1982*	*1990*
College preparatory (academic)	43.8	54.4
Vocational	12.2	8.7
General	44.0	36.9

Although the share of high school students undertaking a general curriculum has declined in recent years, more than one-third of American youths still pursue this course of studies. From a labor market perspective, the problem is that the general curriculum is designed to provide students neither with vocational preparation nor with the ideal background for college. Students can, of course, pursue employment or further education with this background, but their preparation will not be focused on the skills that are required for labor market success either upon graduation from high school or after college.

Table 2 shows that slightly more than half of U.S. youths enroll in college, and approximately one-quarter of U.S. youths will receive at least a 4-year (bachelor's) degree. From an international perspective, this is a relatively large share of youths with a college degree. But for the 20 percent of Americans who leave college without even an associate's degree, two-thirds of them (13 percent of all youths) do not receive any vocational training in a program that leads to some type of certification.

Turning to the 48 percent of high school leavers who did not enroll in college, we find that roughly one-third of them (15 percent of all youths) obtained vocational training that led to a certificate, but two-thirds (31 percent of all youths) did not. Hence, the higher youth unemployment rates of the United States should not be surprising in light of the fact that 31 percent of U.S. youths received no postsecondary education or vocational training whatsoever, and another 13 percent attended college but failed to obtain even an associate's degree and also received no vocational training.[9]

Table 2. Postsecondary education and training in the United States, 1985

Level of education or training as of 1985	Percent of those who left school in 1972, 1973, or 1974
College	52
Attained college degree	32
Attained master's degree	7
Attained bachelor's degree	17
Attained associate's degree	8
Dropped out of college	20
Received certificated vocational training	7
Did not receive certificated vocational training	13
Did not enroll in college	48
Received certificated vocational training	15
Did not receive certificated vocational training	33
Received some postsecondary education or training, but no certificate or degree	2
Received no postsecondary education or training at all	31

NOTE: Percentages are from Christoph F. Buechtemann, Juergen Schupp, and Dana Soloff, "Roads to Work: School-to-Work Transition Patterns in Germany and the United States," *Industrial Relations Journal*, vol. 24, no. 2, 1993, pp. 97–111, based on data from United States Panel Survey of Income Dynamics.

The situation in Germany is quite different. (See table 3.) There, 84 percent of youths pursued a postsecondary vocational or educational certificate. Currently, two-thirds of German youths have passed through an apprenticeship program.[10] By contrast, in the United States, the figure is approximately 3 to 5 percent.[11]

Apprenticeship training in Germany combines classroom instruction with employment, a so-called dual system. For each of the more than 300 occupations that have apprenticeships, there is a nationally standardized curriculum. Students must pass an examination administered by external bodies (chambers of crafts and chambers of industry and commerce) in order to be awarded a journeyman certificate.

The employment portion of the apprenticeship typically lasts between 2½ and 3½ years. Apprentices are trained on the actual machines and equipment they will later use. The apprenticeship will teach the apprentice not only the skills needed for the profession, but also broader work skills, as well as an appreciation for what is needed in general to succeed in the world of work. Although the German Government builds vocational schools and provides some public sector apprenticeships, the overall success of the dual system depends on ensuring that private firms employ a sufficient number of apprentices.

Although unemployment is worse for youths with lower levels of education and training, there are relatively fewer of these people in the population of German youths. In 1990, among German students who left high school in 1978 or 1979, 80 percent either completed vocational education (through an apprenticeship or in some other form) or graduated college.[12] By contrast, among U.S. youths who left high school in the 1972–74 period, only 54 percent received either a college degree or a certificate for vocational training.

The German social consensus

The so-called German dual system tries to combine practical training in an economic enterprise with an education in vocational schools. Generally speaking, the aim of vocational training in Germany is twofold: to enable the individual to acquire the skills and knowledge judged to be necessary for employment; and to ease the person's entry into the labor market. German apprenticeship cannot be fully understood, or its potential transferability to the United States examined, without keeping in mind the fact that German society has a long historical tradition of a social consensus on providing

Table 3. Postsecondary education and training in Germany, 1990

Level of education or training as of 1990	Percent of those who left school in 1978 or 1979
Postsecondary vocational education or apprenticeship training	84
Received apprenticeship certifcate	46
Received full-time vocational education certificate	23
Did not receive vocational certificate	15
Higher education[1]	16
Attained college degree	11
Attained master's degree	9
Attained technical degree	2
Dropped out of college	3
Still enrolled in college	2

[1] Two percent of sample was enrolled in postsecondary vocational education or apprenticeship training, as well as in higher education.

NOTE: Percentages are from Christoph F. Buechtemann, Juergen Schupp, and Dana Soloff, "Roads to Work: School-to-Work Transition Patterns in Germany and the United States," *Industrial Relations Journal*, vol. 24, no. 2, 1993, pp. 97–111, based on data from German Socio-Economic Panel.

young people with good initial vocational training.

This social consensus can be summarized by the slogan, "First of all, vocational training for everybody."[13] In other words, vocational training in any field is said to be better than no training at all. The Germans believe this to be the case even if the apprenticeship will not result in employment in the field for the young, qualified worker now or anytime in the foreseeable future. Germans consider vocational qualifications as having value in themselves, as the training will result in skills that can transfer to other occupations.[14] Not only does apprenticeship confer broadly transferable skills on the individual, but also, it socializes the person into the work force—that is, it results in an understanding of the rules and values of the workplace, such as punctuality, discipline, and the acceptance of hierarchies. In addition, there is a perceived value in the feeling of belonging to a group of coworkers and sharing their common language and values. The German social consensus is that vocational training is important and should be provided to all youths.

A recent incident illustrates that this social consensus regarding vocational education is shared by employers, workers, and the German Government. A restructuring in the German economy had resulted in a shortage of apprenticeship placements in both the private and public sector. The shortage was made even more severe by a recession. The number of apprenticeships dropped from 500,000 in 1992 to 450,000 in 1994.[15] There was a consensus that the latter number was insufficient. The German chancellor, Helmut Kohl, invited the leaders of employers' associations and major trade unions, as well as the ministers of labor, the economy, training and science, and finance, to his office. A communiqué was issued stating that all parties agreed that both vocational training and further training appropriate to the qualifications of the person or to the current labor market situation would attract investors and be of the highest importance to the economic and social future of Germany.[16] An agreement was reached whereby the employers' associations promised that their members, together with the public employers, would create enough apprenticeships to raise the total to 600,000 by 1996. The Government pledged to aid in the implementation of the plan by increasing training subsidies if needed. Based on earlier, similar situations, it is extremely likely that the increase in promised apprenticeships will occur.[17]

The German dual system of apprenticeship training is a key factor in the more successful school-to-work transition in Germany than in the United States and helps explain the low level of German youth unemployment. The system is dependent, however, on a sufficient number of apprenticeship employment opportunities, particularly in the private sector. If the number of apprenticeships is too low, the Government can summon forth an increase with some financial incentives (for example, by awarding more procurement contracts or by allowing business leaders to accompany the chancellor on State visits abroad), but primarily through moral suasion. The Government's ability and even obligation to get firms to increase the number of apprenticeships is deeply rooted in the idea of a social consensus on training, namely, that training will be made available to all qualified youths and that private enterprises regard it as a social obligation to ensure that enough employment openings exist. Without this social consensus, Germany would not be able to create enough apprenticeship opportunities for the system to function well.[18]

Applicability to the United States

There is a substantially higher youth unemployment rate and more difficult school-to-work transition in the United States than in Germany. The rate is especially high for U.S. youths who lack a secondary school diploma, vocational training, or both. A greater share of U.S. youths fall into this category than do German youths. Germany's heavy reliance on an apprenticeship system both trains youths and eases their transition into the labor market. The German system is based on a social consensus that results in private firms providing an adequate number of apprenticeship placements at any given time.

The United States could copy some aspects of the German system with relatively little difficulty—for example, increased occupational certification, more vocational schools, and the use of common national curricula and external examinations. However, the success of any U.S. effort to use apprenticeship as a primary vehicle for reducing youth unemployment and easing the school-to-work transition is more problematic. The

German system is heavily dependent on an adequate number of apprenticeship employment opportunities in the private sector. In Germany, the social consensus on the value of apprenticeships will result in firms providing training slots.[19] To the extent that there is a weaker consensus in the United States, the success of increased apprenticeship training would be limited, and without such a consensus, the prospects for a transfer of the German model are questionable at best. □

Footnotes

ACKNOWLEDGMENT: The authors gratefully acknowledge the help of Helmut Rudolph of the IAB, Nuremberg, for data on the German labor market.

[1] James J. Heckman, Rebecca L. Roselius, and Jeffrey A. Smith, *U.S. Education and Training Policy: A Re-evaluation of the Underlying Assumptions behind the "New Consensus,"* Working Paper #CSPE 94–1 (Chicago, Center for Social Program Evaluation, University of Chicago, 1993).

[2] Unless otherwise indicated, all references to Germany are to unified Germany.

[3] On the face of it, one might view the situation of falling unemployment rates with age as meaning that there is no lasting effect from teen unemployment and that American youths are just taking longer to find a permanent job. A closer look, however, leads one to a different conclusion: a sizable number of youths—especially those with lower levels of education—are not able to attain stable employment in later years. Jacob A. Klerman and Lynn A. Karoly ("Young men and the transition to stable employment," *Monthly Labor Review*, August 1994, pp. 31–48) found that almost one-quarter of male high school dropouts had never held a job of even as little as 2 years' length by their late twenties. From this, one might argue that the longer run job prospects of this group may not be good either.

[4] The U.S. figure is even more surprising, given the fact that in the United States, over the period 1983–92, the number of 16- to 24-year-olds fell by 14.3 percent, while the overall population 16 years and older increased by 13.8 percent. With a decreasing supply of young workers, one might have expected a decline in the youth unemployment rate.

[5] Data from Organization for Economic Cooperation and Development, *The OECD Employment Outlook, July, 1994* (Paris, OECD, 1994), p. 23. For the most part, youths 15 to 19 years had not yet completed their secondary schooling; hence, they are omitted from the tabulation.

[6] National Center for Education Statistics, *Youth Indicators, 1993* (Washington, Department of Education, 1993).

[7] *Digest of Educational Statistics, 1995* (U.S. Department of Education, National Center for Educational Statistics, 1995), p. 493.

[8] *Ibid.*, p. 60.

[9] Christoph F. Buechtemann, Juergen Schupp, and Dana Soloff found that one-tenth of U.S. youths received no postsecondary training whatsoever and were working at a job that required less than three months of on-the-job training. Because replacements for these workers can easily be hired and trained, it is once again not surprising that a substantial number of U.S. youths will be facing difficulties in the labor market. (See Christoph F. Buechtemann, Juergen Schupp, and Dana Soloff, "Roads to Work: School-to-Work Transition Patterns in Germany and the United States," *Industrial Relations Journal*, vol. 24, no. 2, 1993, pp. 97–111.)

[10] See Hilary Steedman, "The Economics of Youth Training in Germany," *Economic Journal*, September 1993, pp. 1279–91.

[11] See Lisa M. Lynch, "The Economics of Youth Training in the United States," *Economic Journal*, September 1993, pp. 1261–78; and Robert J. Gitter, "Apprenticeship-trained workers: United States and Great Britain," *Monthly Labor Review*, April 1994, pp. 38–43.

[12] Substantially fewer German youths (16 percent) pursue higher education than do American youths (52 percent). Those German youths who do enroll, however, have a higher probability of completing their degree.

[13] Authors' translation of quote from Klaus Daweke, spokesperson for training policies of the governing Christian Democratic Union party in the *Bundestag*, the German lower House of Parliament.

[14] See Myriam Campinos-Dubernet and Jean-Marc Grando, "Formation professionnelle ouvrière: Trois modèles européens," *Formation emploi*, no. 22, 1988, pp. 5–29, especially p. 9. One example of the transferability of training occurred in the early 1960s. There was a shortage of trained workers in the chemical industry, and the industry was forced to employ people trained in other areas. One firm sought out cooks and bakers. As one manager explained, bakers and cooks had acquired a sense of timing in the food production process, and that skill is important in the chemical industry as well.

[15] The figures are for western Germany only. The situation in eastern Germany is unique due to the region's ongoing transformation from a planned economy to a market economy.

[16] See the *Frankfurter Allgemeine Zeitung*, Mar. 17, 1995, p. 18.

[17] In fact, there was a small increase in apprenticeship placements from 1994 to 1995; see Rudolf Werner, "Rückgang der Ausbildungsplätze betrifft Kernbereiche des dualen Systems—eine statistische Analyse," in *Berufsbildung in Wissenschaft und Praxis*, vol. 25, no. 3 (1996), pp. 14–20.

Arguably, the best known display of the social consensus on apprenticeship training was in the early 1980s, when Chancellor Helmut Kohl made the shortage of apprenticeship training positions a major issue in his election campaign. He promised to induce enterprises to fulfill their "duties" to training. Following his election, Kohl gathered together representatives of employers' organizations and chambers of industry, commerce, and crafts. After deliberations, the employers guaranteed an apprenticeship to every young German who was willing and able to assume one. With financial assistance from the Government, more than enough apprenticeships were created.

[18] Note, however, that although the social consensus exists, it does require the efforts of the German Government to keep it intact. Recently, concern has arisen about the availability of an adequate number of training places in core industries (see Werner, "Rückgang der Ausbildungsplätze"), and Chancellor Kohl has already begun efforts to ensure a sufficient number of places for 1997 (see "Kohl fordert mehr Lehrstellen," *Handelsblatt*, no. 120, June 25, 1996, p. 4).

[19] This consensus is not universal to all European nations. France, for example, lacks it. (See Odile Benoit-Guilbot, Helmut Rudolph, and Markus Scheuer, "Youth Unemployment in France and Germany," paper presented at the European Association of Labor Economists, Maastricht, the Netherlands, Sept. 30–Oct. 3, 1993.

The baseball strike of 1994–95

The biggest strike ever in professional sports resulted in lost money for the owners and players and in disillusionment for the fans; although the game bounced back somewhat in 1996 and finally got its long-awaited collective bargaining agreement, problems remain

Paul D. Staudohar

Baseball survived the 232-day strike of 1994–95. While full recovery of the game to its former stature remains problematic, it is surely dependent on a prolonged period of labor-management peace. Using a model of collective bargaining set forth in the next section, this article examines the strike and its aftermath, in order to analyze what happened and why. Since 1972, negotiation between the union and owners over contract terms has led to eight work stoppages that have plagued baseball. Hence, there is a clear need for a critical review of the bargaining process.

Industrial relations scholars have long pondered the road to labor-management peace. Over the last half-century, a substantial literature has emerged that offers analytical models, as well as principles, for resolving negotiation problems and preventing work stoppages.[1] One might suppose that because of the intractability of baseball's labor-management relations, there are no models or principles that apply. This is not the case, however, and the literature provides ample guidance.

Bargaining model

The negotiations leading to work stoppages in baseball can be analyzed in terms of four principal areas: the allocation of revenues through collective bargaining between the union and owners, the exploration of mutual gain through cooperation, the behavioral atmosphere at the bargaining table, and accommodation to the differing interests of the negotiators' constituencies. This is the model that is used to review the 1994–95 strike.

The first area presents the most difficult problem for resolution in bargaining, because it involves the distribution of the economic pie between owners and players. Although the size of this pie may not be that significant compared with, say, the revenues of the automobile or electrical parts industries, sports dollars from television, gate receipts, luxury box seats, licensing agreements, and other sources have grown into the billions. The number of participants seeking a share of the pie is not large—about 750 players and 28 owners—so each has a lot at stake. This intensifies the pressure to win. Also, negotiations in baseball take place in a fishbowl environment, carefully scrutinized by the media and fans. Bargaining of this type has traditionally been adversarial, characterized by confrontation and the use of pressure tactics.

The second area, cooperating in negotiations for mutual gain, has been virtually nonexistent in baseball to date because the participants have been too preoccupied with battling each other. Yet there is considerable potential for enhancing the size of the pie through joint problem solving, as exemplified by basketball's pioneering drug control program. Issues such as salary caps and revenue sharing involve negotiations over money, but through creative arrangements, they can provide a stability to the sport that increases the economic return for all participants.

Trouble has brewed aplenty for baseball in the third area, the bargaining atmosphere. If attitudes are favorable, they promote mutual understanding and agreement; if not, they lead to conflict

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and work stoppages. Baseball's problem is that players and owners do not appear to trust each other. Beginning with the emergence of Marvin Miller as the leader of the Major League Baseball Players Association in the late 1960s, the players have adopted an adversarial stance, and the owners have responded in kind. Distrust, disrespect, lack of accommodation, name-calling, and inattention to face-saving have characterized negotiations, poisoning chances for uninterrupted play.

The fourth area for potential difficulty or advantage in negotiations is the necessity for the chief negotiator on each side to bargain with his own constituency. That is, the owners' negotiator must be able to reconcile the diverse interests of the owners themselves, and the union negotiator has to deal with the various needs of the players. This is a challenging task because owners differ in having big-market or small-market teams, in being more or less strongly antilabor, and in being more or less fervently committed to team development. Players, too, have a big stake in outcomes (collective bargaining determines important aspects of their individual salary negotiations with teams—for example, free agency and salary arbitration), and their interests must be accommodated. Nor are all players alike: older players may have different aspirations than younger ones, and superstars may have goals that cannot be realized by journeymen. It is the job of the union's chief negotiator to try to get all players on the same page, pulling together at the bargaining table.

If either the owners or the players do not have a united front, negotiations are complicated by internal dissension. Generally, the players have done a better job of achieving solidarity than the owners have. But each side experiences tough sledding to generate consensus, and this has become one of the biggest barriers to agreement at the bargaining table.

Past work stoppages

We usually think of work stoppages in baseball as modern-day phenomena, and yet there was conflict between players and owners in the early days of the game. In 1880, the reserve clause was written into players' contracts to prevent the players from moving freely from one team to another. This practice bound players to a single team, creating what economists call a *monopsony*—one buyer in a market—which limited players' salary potential.

The establishment of the reserve clause led to the formation of the first players' union in 1885, the Brotherhood of Professional Base Ball Players. The organizer of the union was John Montgomery Ward, star pitcher and infielder for the New York Giants, who was later enshrined in the Hall of Fame. Ward sought free agency for certain long-term players, and when his efforts failed, the so-called Brotherhood Revolt of 1890 was staged by about 200 major leaguers. Although the revolt was not a strike as such, a rival league was established by the best players in the game. This Players League collapsed after a year in the face of pressure from National League club owner Albert G. Spalding (another Hall of Famer), but it shows that the early players were willing to take drastic action against owners.

A strike by players on the Detroit Tigers occurred in 1912, believed to be the first ever in baseball. The great Ty Cobb was suspended for 10 days for jumping into the stands to beat up a heckling fan. As a protest to this suspension, imposed by American League president Ban Johnson, Cobb's teammates staged a one-day walkout.

In the modern era, work stoppages occurred in 1972, 1973, 1976, 1980, 1981, 1985, 1990, and, of course, 1994–95. Beginning in 1972, a work stoppage has accompanied each expiration of a collective bargaining agreement. Players struck in 1972 over their benefit plan, causing a 10-day delay in the start of the season. The owners agreed to add $500,000 for health care benefits and provided a cost-of-living increase for retirement benefits. In 1973, the owners refused to allow spring training to proceed without a collective bargaining agreement, but an agreement was reached, so no exhibition games were affected.

In 1976, the owners locked the players out by shutting down training camps for 17 days. Commissioner Bowie Kuhn ordered that spring training be resumed, and on August 19 a new agreement was reached that gave players the right to become free agents after 6 years. In 1980, players struck for the final 8 days of spring training, forcing the cancellation of 92 exhibition games. As a result, a 4-year labor agreement was reached that allowed the issue of free agency to be opened for further discussion during the 1981 season.

A study committee of owners and players was formed to look into free agency, but was unable to resolve the issue by 1981. When the owners indicated their intention to put their own free-agency plan into effect, the players staged the first midseason strike in baseball history. Three points about this strike stand out. First, the players stuck together better than the owners, and player solidarity proved decisive as the owners dropped their plan for compensating teams that lost free agents. Second, the parties sought outside mediation assistance from the Federal Mediation and Conciliation Service; however, this agency, which was also involved in the 1994–95 strike, was not very effective, as the chief negotiators—Marvin Miller for the union and Ray Grebey for the owners—did not see eye to eye. Third, a point that also arose in the 1994–95 strike, the stoppage was prolonged by the tense relationship between Miller and Grebey, which spilled over into caustic ad hominem attacks in the media. The 1981 strike lasted 50 days and caused the cancellation of 713 games. When the dust settled, the parties agreed to extend the 1980 contract through December 31, 1984. The regular season resumed following the All-Star game, and the division winners from the first half of the season played the second-half divi-

sion winners in the first-ever divisional playoffs.

The players' strike in 1985 was a mercifully short affair, just 2 days. Again, the conflict was over allocating the economic pie, this time the $1.125 billion television package that began in 1984. Salary arbitration was the focal point of the discussions. First used in the 1974 season, this feature allows a player to have his salary for the coming year determined by an arbitrator if the player is unable to come to agreement in individual negotiations with the club, with the arbitrator required to pick either the club's or the player's final offer. As part of the new 5-year collective bargaining agreement, players were now required to achieve 3 years of major league experience before becoming eligible for arbitration, up from the previous 2-year waiting period. A pivotal role in reaching agreement was played by Commissioner Peter Ueberroth, who mediated the dispute. The 25 games lost to the strike were made up later in the season.

In 1990, the players were locked out of training camps for 32 days.[2] The 1990 lockout resembles the 1994–95 strike in that the owners proposed a radical restructuring of the collective bargaining agreement. The owners principally sought revenue sharing, with players guaranteed 48 percent of revenues from ticket sales and media contracts; a pay-for-performance arrangement in which players with 0 to 6 years of experience would be compensated on the basis of statistical formulas, by position; and a salary cap limiting the total salaries that a team could pay to all its players, so as to protect teams in small markets. The players sought the restoration of the 2-year period of prior service required for eligibility for salary arbitration from the current 3 years, a near doubling of minimum salaries, and the continuation of the existing formula for owner contributions to the pension and health benefit plans.

The 1990 lockout was a preemptive action by the owners, seeking to force the players into agreement early in the season. Fearful of a players' strike late in the season, when most of the owners' television revenues were to kick in, the owners were willing to forfeit far smaller amounts of revenue in order to put pressure on the players. The tactic was not very successful, however, in that the owners had to drop their major demands in the end. They did succeed in holding onto most of the requirement for eligibility for salary arbitration (the union won eligibility for only the top 17 percent of players with 2 to 3 years of experience), but the union secured significant increases in the benefit fund and the minimum salary for the players. Also, under the new 4-year contract, each team's roster was scheduled to increase from 24 to 25 in 1991, and either side would be able to reopen contract negotiations on major economic issues after 3 years.

Then-commissioner Fay Vincent was instrumental in bringing an end to the 1990 lockout. He audited negotiations and made his own recommendations for compromise known to the public, which led to the owners dropping their most radical proposals for change. Vincent was also able to work out an agreement with CBS to delay postseason play. This allowed the start of the regular season to be put back and the 78 games postponed by the lockout to be rescheduled.

Preliminary rounds

The first shot leading to the 1994–95 strike was the owners' decision in December 1992 to reopen negotiations on salaries and the free-agency system. The vote for reopening was close, 15–13, and the owners tried to play down the idea of confrontation by urging the players to join them in a "partnership" and by revising their rules to require a three-fourths vote for a lockout rather than a simple majority. Despite this rhetoric, by voting to reopen negotiations, the owners showed their intention to take a proactive stance on effecting change. Another ominous sign was that a few months earlier Commissioner Vincent had resigned under pressure from the owners, and the office was left vacant.

Some meetings were held between the union and the owners in 1993, but no tangible offers were made by either side. In effect, the owners' decision to reopen the contract turned out to be unproductive, and the lack of any constructive progress only served to frustrate the union and squander an opportunity to discuss economic issues in a noncrisis atmos-phere. Meanwhile, the 4-year collective bargaining agreement expired on December 31, 1993. Then, still holding off on formal proposals, the owners agreed among themselves by a 28–0 vote to share revenue on the condition that they could get the players to accept a salary cap.

By taking this action, the owners signaled their intention to come to grips with the problem of the disparity between big-market teams in cities like New York, Los Angeles, and Chicago and small-market teams such as Seattle, Pittsburgh, and Milwaukee. The problem, however, was that because the owners linked their revenue sharing with a salary cap, the players felt that they were being asked to solve the owners' financial disparity problem. A further complication was that a salary cap entails a salary floor, so small-market teams would have to pay salaries up to a certain minimum. The small-market teams wanted the assurance of a subsidy to meet this minimum and a way to prevent windfall profits by big-market teams whose payrolls would be reduced by the cap. There is a marked difference in team payrolls, as exemplified by those in 1993, when the payroll of the Toronto Blue Jays was $48.4 million, compared with the San Diego Padres' payroll of only $10.6 million.[3]

Thus, the idea of revenue sharing, wherein big-market teams would transfer monies to their small-market brethren, was a good one, but it caused divisiveness among the owners as to how the formula would be worked out. Not all small-market teams were in bad shape financially; some that had built or were building new stadiums with plentiful luxury boxes, such as Baltimore,

Cleveland, and Texas, were doing quite well.

Underscoring the plight of many small-market teams, and a major factor in the decision on the part of the players to strike, were the revised television contracts. National television revenues are shared equally among baseball clubs. In 1993, the television contracts were scaled down dramatically because of low ratings that caused CBS to lose about $500 million and ESPN about $150 million under the previous agreements.[4] Under the terms of the new agreement with NBC and ABC, revenues to baseball were made contingent solely on advertising sales for games under a joint venture between the networks and baseball, called the Baseball Network. Although ESPN's revised contract with baseball continued to provide up-front money, total revenues to baseball from television were cut by at least half. This reduction hit several small-market teams especially hard, because they were less able to offset the shortfall through gate receipts and local broadcast revenues, which are not shared among teams. (There is *some* sharing of gate receipts, with 80 percent to the home team and 20 percent to the visiting team in the American League and about a 95–5 split in the National League.)

Positions and negotiators

It was not until June 14, 1994, that the owners finally presented their collective bargaining proposal, 18 months after they voted to reopen the contract. The owners proposed a 7-year contract that would split their total revenue with the players, 50–50, while phasing in a salary cap over 4 years. Provided that revenues did not fall, the players would be guaranteed no less than the $1 billion in pay and benefits scheduled for 1994. The proposal also eliminated salary arbitration, but allowed players with 4 to 6 years of major league service to become free agents (compared with the 6 years previously required for free agency), with a right of first refusal by the player's current club. For players with fewer than 4 years of service, an escalating scale of minimum salaries was proposed, with the actual minimum amounts to be negotiated collectively. Players' licensing revenue (about $80,000 per player) would have to be split with the owners. Depending on the average obligation to the players under the 50–50 split of total revenues, no team could have a payroll of more than 110 percent of that average or less than 84 percent.

To the players, the owners' proposal had several shortcomings. The players' share of 50 percent of revenues would be a cut from the existing share of 56 percent. Moreover, the players did not want to share their licensing revenue, and the loss of salary arbitration would remove a major impetus to higher player salaries. Although free agency would be liberalized, it came with the catch that the current club could retain a player by matching the offer of a club seeking a free agent. Another drawback was that the players' pensions, health coverage, and other benefits would be funded out of their own 50-percent share of revenues.

The union's executive director, Donald Fehr, estimated that the owners' proposal would cost the players $1.5 billion in salary over the 7-year life of the contract.[5] On June 18, the union predictably rejected the salary cap and other major aspects of the owners' proposal. For its part, the union proposed lowering the threshold for qualifying for salary arbitration to 2 years, eliminating the restriction on repeat free agency within 5 years, and raising minimum salaries to $175,000 and, eventually, $200,000. In essence, the union was content with maintaining the status quo. With the union spurning the owners' proposals, it was not surprising that a few days later the owners likewise rejected the union's offer. No real bargaining had occurred at this juncture. The purpose of the negotiators—Richard Ravitch of the Player Relations Council (the owners' bargaining group) and the Players Association's Fehr—was to get their positions before the print and broadcast media. This was consistent with contract negotiations over the past quarter-century in baseball and suggested a strong likelihood of a work stoppage.

Baseball negotiations in the modern era have been plagued by strong-willed and abrasive personalities. Marvin Miller set the tone when he refused to accept the paternalism between owners and players that had existed for so long in the game.[6] Instead, he determined to establish an adversarial relationship that continues to the present.

Fehr, Miller's successor since 1983, is a law school graduate of the University of Missouri at Kansas City. He had represented the union on legal matters since 1977, with the Kansas City firm of Jolley, Moran, Walsh, Hager, and Gordon. Like Miller, Fehr is a tough negotiator who emphasizes close contact with the players. One of the reasons for the union's success over the years is its solidarity, stemming in large part from able leadership and the outstanding job that leadership has done communicating with the players. This has enabled the union to make huge gains at the bargaining table and generally to hang on to what it acquires.

Fehr's opposite number as chief negotiator for the owners during much of the 1994–95 negotiations was Ravitch. A graduate of Yale Law School, he had a successful career with the Urban Development Corporation and as chairman of the New York Metropolitan Transit Authority. While not ostensibly hired to wage war on the Players Association, Ravitch admits to having "been characterized as a union buster" in his nonbaseball jobs.[7] A prickly relationship soon developed between Ravitch and Fehr, exacerbated by their negotiating styles. In contrast to Fehr's closeness to the players, Ravitch preferred to develop a personal bond with his opposite number in order to facilitate deals through backroom bargaining.[8]

Although not apparently orchestrated by Ravitch, one of the owners' blunders during negotiations prior to the strike was to withhold payment of $7.8 million in scheduled contributions to the players' pension fund, money that the players were entitled

to for participation in the 1994 All-Star game. This is a good example of how ill-advised action can undermine negotiations by creating animosity among the participants. Fehr was also responsible for some questionable ripostes, stating that Ravitch lacked independence and was strictly a "hatchet man" for the owners.[9] The two chief negotiators became known as "Fehr and Loathing," and their hostile relationship was a key factor in causing and prolonging the strike.

Strike dynamics

The players felt that they had little alternative to striking. Had they continued playing through the season without coming to an agreement, the owners could have declared an impasse and unilaterally implemented their proposals. Also, the timing of the strike, which began on August 12, 1994, was propitious for the union because it inflicted maximum damage on the owners. That late in the season, the players had received most of their pay, but the owners were vulnerable to big losses because they receive three-fourths of their television revenues from postseason play. In anticipation of a strike, for the previous 4 years the Players Association had retained a portion of each player's licensing revenues from the sale of products such as baseball cards. As a result, a strike fund of about $175 million was accumulated so that each player with 4 years' experience would have about $150,000 to ride out the strike.

At the outset of the strike, the parties agreed to accept mediation efforts by the Federal Mediation and Conciliation Service. Mediators try to persuade the parties to make concessions and come to an agreement, but, unlike arbitrators, have no power to impose a settlement. Thus, as in the 1981 strike, mediation would not necessarily bring an end to the dispute. Several Federal mediators, including the Conciliation Service's director, John Calhoun Wells, were unable to make progress toward settlement in 1994, because the parties were polarized and committed to disagreeing. Under such circumstances, no mediator can be successful. One change that did result from the suggestions of mediators was that several owners became involved in negotiations, and bargaining influence began to slip away from Ravitch and toward owners Jerry McMorris of Colorado and John Harrington of Boston.

Under the owners' rules, a three-fourths vote was required to approve a settlement. This created a formidable obstacle because the owners were split generally into three groups. The groups were largely based on market size, with the hawkish advocates of radical change from small-market teams like Kansas City, Milwaukee, Minnesota, Montreal, Pittsburgh, San Diego, and Seattle. On the other end of the spectrum were owners with teams in large markets and some owners from smaller market teams that had recently built new stadiums and were doing well financially. These dovish clubs, with more to lose from a prolonged strike, included Atlanta, Boston, Colorado, Los Angeles, the New York teams, Texas, and Toronto. The remaining teams were somewhere in between, looking for moderate change, but susceptible to arm-twisting from either the hawks or doves.

In late August, McMorris and the owners' legal counsel, Charles O'Connor, suggested the idea of a graduated "luxury tax" to the union. If a club's payroll significantly exceeded the major league average, that club would have to pay a luxury tax based on its total payroll. The tax rate would be graduated the more the club's payroll exceeded the major league average. Money from the tax would go into a pool that would be distributed to financially needy teams.

The union viewed this proposal as a salary cap in disguise, because clubs would resist signing high-salaried free agents if the addition to payroll would have the double-barreled effect of a tax as well. Still, the union tried to work with the luxury tax concept, proposing a 1.5-percent tax on revenues and payrolls of the 16 largest clubs in terms of revenue and payroll, with the money distributed to the bottom 12 clubs. The union also suggested that home teams share 25 percent of their gate receipts with visiting teams. Shortly after rejecting the union's counteroffer, on September 14, 1994, the owners declared the cancellation of the World Series for the first time since 1904.

In mid-October, President Bill Clinton announced the appointment of William J. Usery, Jr., to mediate the dispute. The President could not have chosen a more able representative. Usery was Secretary of Labor in the Ford administration and before that was director of the Federal Mediation and Conciliation Service. Although 70 years old, Usery had remained active after his Government service by privately mediating some of the Nation's biggest industrial disputes in recent years. He had the experience to identify common ground and the tenacity to move the parties in that direction, but he lacked knowledge of the intricacies of baseball labor relations.

Unfortunately, Usery suffered the same fate as the earlier mediators. The parties modified their proposals somewhat, but remained far apart. The owners wanted to contain the salary escalation, which had grown to an average of nearly $1.2 million per player, while the union was unwilling to do so. At least there was an understanding between the parties that some kind of revenue redistribution should occur from richer to poorer teams. Compromise was frustrated, however, by continued bickering among the negotiators and lack of consensus among the owners.

By the end of 1994, negotiations were bogging down, and the owners declared an impasse, thus putting the salary cap into effect. The declaration of an impasse is a dreaded scenario for the union because it means that management can implement its own proposals. To indicate its opposition to the owners' tack, the union filed unfair labor practice charges with the National Labor Relations Board (NLRB). These charges were later to bear fruit.

But meanwhile, attention shifted to other avenues of breaking the deadlock. Ravitch resigned as negotiator. The owners

indicated that they would use replacement players if the strike was not resolved by the start of the 1995 season. Baltimore owner Peter Angelos broke ranks by announcing that he would not use replacement players. Also complicating the owners' resolve was a law in Ontario that prevented employers such as the Toronto club from using replacement workers. Like Angelos, Detroit manager Sparky Anderson stated that he would not work with replacement players.

At this juncture, an interesting Government stratagem developed. Frustrated by Usery's futile mediation, President Clinton tried to turn up the heat by calling the negotiators to the White House and indicating that if a settlement was not reached by February 7, 1995, he would ask Usery to make his own recommendations for settlement. Such recommendations would not be binding, but the President intimated that they would be sent to Congress for legislative action or used as a basis for arbitration.

Congress, however, was not receptive to the idea of a legislated settlement. House Speaker Newt Gingrich stated, "I'm not sure Congress is the right place to try to organize the national pastime."[10] Senate Majority Leader Robert Dole said, "We're very, very reluctant to have Congress get involved."[11] Thus, Usery's proposed settlement and the President's bill got nowhere. Neither did the idea of arbitration, because the parties would not mutually agree to allow an arbitrator to decide their fate in such an elaborate and complex matter.

A more likely prospect was the repeal of baseball's exemption from the antitrust laws. Although this would not necessarily end the strike, it would induce the owners to make concessions out of fear of antitrust litigation. Senators Orrin Hatch, Daniel Patrick Moynihan, and Bob Graham introduced a bill in February 1995 that would have partially repealed the exemption. The bill would allow players to sue the owners if they unilaterally implemented work rules, but would not have affected other aspects of the antitrust exemption, such as baseball's ability to control its franchises and the minor leagues. But again, Congress did not pass the bill.

It's over

The strike ended as a result of Government action, but not by the President or Congress, upon whom attention had been focused. As noted earlier, at the end of 1994 the owners imposed a salary cap, reasoning that an impasse had been reached in the negotiations. This prompted the union to file unfair labor practice charges with the NLRB, accusing the owners of failure to negotiate in good faith and imposing the cap without a genuine impasse. Recall that, although the owners had reopened negotiations in December 1992, they did not make an offer until 18 months later. Moreover, the offer proposed radical changes in the agreement. Then, after the owners made little substantive change in their position, an impasse was declared. In light of these facts, the owners were vulnerable to charges of violation of labor law.

On March 26, 1995, the NLRB voted 3–2 to seek a court injunction forcing the owners to reinstate the provisions of the old collective bargaining agreement. Earlier, the Board had issued a complaint to the effect that the owners violated the National Labor Relations Act by implementing their proposal when no legal impasse existed. At the time of the injunction the owners might have imposed a lockout, but it is unlikely that they could have gotten the three-fourths vote needed to do so. Although technically the NLRB had only issued a complaint against the owners, and there was as yet no definitive ruling on the merits of the unfair labor practice charges, which could take considerable time, the Board's decision to seek an injunction pushed the matter to the court for speedy action. Wisely, Fehr indicated that the players would end the strike under cover of such an injunction.

So the spotlight shifted to the Manhattan courtroom of U.S. District Court Judge Sonia Sotomayor. On March 31, 1995, Judge Sotomayor granted the NLRB's request for a preliminary injunction against the owners. She noted that "When a contract ends, the parties must not alter mandatory subjects until a new agreement is reached or a good-faith impasse is reached."[12] The court decision ended the work stoppage because the union called off the strike and the owners did not proceed with a lockout. A foreshortened season of 144 games began in late April.

Implications of the strike

The resumption of play by real big leaguers proved, once again, the old adage that "all strikes must end." But Yogi Berra may have the last word here, because "it isn't over till it's over." Nothing was settled by the strike, because the old contract provisions continued to apply, which has to make the strike one of the most eventful, but unproductive, ever. At the end of the strike, the owners announced losses of $700 million and then added another $300 million in losses resulting from a delay of the start of the 1995 season.[13] Veteran players got some protection from the union strike fund, but they were really being paid back their own money, while other players got little or nothing. Average salaries dropped about 5 percent, from $1,168,263 in 1994 to $1,110,776 in 1995, as financially straitened clubs dug deeply into the minor leagues for cheaper talent and many veterans were released or took sizable pay cuts.

Fans, of course, were disappointed with the cancellation of postseason play, as well as the loss of the chance to see whether players could set records. Both Ken Griffey, Jr., and Matt Williams were on track to hit more than 50 home runs, Jeff Bagwell was averaging a run batted in for every game he played, and several other players were having sensational years. The divisional races were wide open, and the conclusion of the season would have been exciting. Disgruntled fans sent a message of "a plague on both your houses" in

1995 by means of a 20-percent drop in attendance.

By the end of 1996, some of the clouds overhanging the game had been swept away. Postseason play in 1995 sparked renewed interest in fans. The 1993 television agreements with NBC and ABC were terminated by the networks at the end of the 1995 season, and new contracts with NBC and Fox put baseball back in the pink in up-front money and out of the disastrous Baseball Network advertising arrangement. Also, baseball will grow with two new teams in the 1998 season, the Arizona Diamondbacks and the Tampa Bay Devil Rays.

A troublesome barrier to long-term stability was finally cleared when the parties reached a collective bargaining agreement in November 1996. Just 3 weeks earlier the owners had rejected a tentative agreement between their new negotiator, Randy Levine, and Fehr. A major factor in breaking the deadlock was the signing of free agent Albert Belle by Chicago White Sox owner Jerry Reinsdorf. An influential opponent of a settlement, Reinsdorf had argued the need for fiscal restraint among owners, but then he signed Belle for $55 million over 5 years, far more than any player previously had received. With Reinsdorf's actions belying his words, opposition by the owners dissolved into a 26–4 ratification of the agreement.

The new agreement contains many of the features of the old one, with little modification, in particular as regards salary arbitration and free agency. Minimum salaries were upped from $109,000 to $150,000 in 1997. The principal change is a luxury tax on team payrolls exceeding $51 million in 1997, $55 million in 1998, and $58.9 million in 1999. The tax rate is 35 percent for 1997–98 and 34 percent in 1999. No luxury tax will be in effect in 2000, and the players can opt to extend the agreement to 2001 without a tax. Proceeds from the luxury tax go into a revenue-sharing pool, along with monies from a new 2.5-percent tax on player salaries. The pool, which is further augmented by the donation of some local broadcast revenues by wealthy clubs, is distributed to 13 small-market teams to enable them to compete better financially.

The new revenue sharing and salary restraints are expected to be relatively moderate in their impact. Basketball and football have similar constraints on salary growth, and players in those sports have continued to enjoy generous economic rewards. Perhaps more important, as a result of the new arrangements, these sports have not had work stoppages. Hopefully, baseball can do the same. As part of the new agreement, the owners and players agreed to interleague play for the first time during the regular season. The move should help stimulate lagging attendance.

The biggest remaining problem is the absence of a commissioner. Interim commissioner Bud Selig, the Milwaukee owner, tried to be impartial, but it is difficult for him to avoid charges of conflict of interest (however unfair they may be) and to function successfully in all facets of the job. Baseball has had some outstanding commissioners over the years and sorely needs one now. □

Footnotes

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[1] Some of the major texts on the subject are E. Wight Bakke, *Mutual Survival: The Goals of Labor and Management* (New York, Harper and Row, 1946); Frederick Harbison and John R. Coleman, *Goals and Strategy in Collective Bargaining* (New York, Harper and Row, 1951); *Causes of Industrial Peace under Collective Bargaining: Fundamentals of Labor Peace* (Washington, DC, National Planning Association, 1953); Ann Douglas, *Industrial Peacemaking* (New York, Columbia University Press, 1962); Thomas A. Kochan, *Collective Bargaining and Industrial Relations: From Theory to Policy and Practice* (Homewood, IL, Richard D. Irwin, 1980); G. G. Somers, ed., *Collective Bargaining: Contemporary American Experience* (Madison, WI, Industrial Relations Research Association, 1980); Richard E. Walton and Robert B. McKersie, *A Behavioral Theory of Labor Negotiations: An Analysis of a Social Interaction System* (Ithaca, NY, ILR Press (Cornell University), 1991); and Roger Fisher and William Ury, *Getting to Yes: Negotiating Agreement without Giving In* (New York, Penguin Books, 1981, 1991).

[2] For further details, see Paul D. Staudohar, "Baseball Impasse: Locking Out for Number One," *The New York Times*, Mar. 11, 1990, p. 27; and "Baseball labor relations: The lockout of 1990," *Monthly Labor Review*, October 1990, pp. 32–36.

[3] Data from John Helyar, "Inside Baseball: Owners Grapple with Revenue Sharing," *The Wall Street Journal*, Jan. 6, 1994, p. B1.

[4] Paul D. Staudohar, *Playing for Dollars: Labor Relations and the Sports Business* (Ithaca, NY, Cornell University Press, 1996), p. 20.

[5] John Helyar, "Baseball Players Set August 12 as Date to Go on Strike," *The Wall Street Journal*, July 29, 1994, p. B6.

[6] For an interesting account of the transformation of the Players Association into a mainstream labor union, see Marvin Miller, *A Whole Different Ball Game: The Sport and Business of Baseball* (New York, Birch Lane Press, 1991); and Charles P. Korr, "Marvin Miller and the New Unionism in Baseball," in Paul D. Staudohar and James A. Mangan, eds., *The Business of Professional Sports* (Urbana, IL, University of Illinois Press, 1991), pp. 115–34.

[7] Ross Newhan, "Baseball Owners Open Door to Talks," *Los Angeles Times*, Dec. 12, 1992, p. C1.

[8] Tom Verducci, "In the Strike Zone," *Sports Illustrated*, Aug. 1, 1994, p. 28.

[9] Ross Newhan, "Ravitch Derided by Fehr," *Los Angeles Times*, Aug. 23, 1994, p. C1.

[10] "President Personally Calls for End to Baseball Strike," *The Wall Street Journal*, Feb. 8, 1995, p. B6.

[11] John Helyar and David Rogers, "Congress Resists Taking a Swing in Baseball Strike," *The Wall Street Journal*, Feb. 9, 1995, p. A3.

[12] Tom Verducci, "Brushback," *Sports Illustrated*, Apr. 10, 1995, p. 62.

[13] See John Helyar, "Owners Vote to Play Real Baseball; Season Scheduled to Start on April 26," *The Wall Street Journal*, Apr. 3, 1995, p. A2; and Stefan Fatsis, "Once-Haughty Majors Woo Fans with Fun," *The Wall Street Journal*, Feb. 23, 1996, p. B7.

Labor market exclusion

Employment Outlook, July 1996. Washington, Organization for Economic Co-operation and Development, 1996, 212 pp. $60.

The deepening problem of unemployment and poverty in many of the 27 member countries of the Organization for Economic Co-Operation and Development (OECD) is analyzed in terms of its implications for labor markets and social aid in this, the OECD's 14th annual report. The theme of the report is well expressed by the heading of its editorial introduction—"Countering the risks of labour market exclusion." The report deals at length with low-wage workers and the growing inequality of earnings (especially in the United States and the United Kingdom); the lagging earnings mobility of such workers; the evident link between low wages, poverty, and withdrawal from the labor force; and the employment problems of youths. Labor market exclusion, in the view of the report's authors, entails the endangerment of the social fabric.

The terms of the discussion are being set by the labor market, so the problems discussed would likewise be resolved through the labor market. Be it noted, however, that the authors approach the labor market entirely by way of its supply side. They remain silent about its demand side, where those problems in large measure arise.

The report projects the Gross Domestic Product (GDP) to rise by 2.5 percent for all the OECD countries (2.0 percent for the United States)—as compared with an average annual rate of 2.8 percent for the 1983–93 decade (2.9 percent for the United States). It expects a rather low advance in employment in 1997, and no significant change in the unemployment rate. Among European OECD members, unemployment will exceed 10 percent of the labor force (5.6 percent for the United States). The number of unemployed persons will run close to 34 million.

Unemployment in many OECD countries is not only high, it is aggravated by long duration. In the United Kingdom, for example, 61 percent of all jobless persons were out of work 6 months or more in 1995; nearly 44 percent were unemployed 12 months or more. For Germany, the comparable figures were 65 percent and 48 percent; for France, 69 percent and 46 percent (but for the United States, 17 percent and 11 percent). In brief, roughly one-half of all unemployment in major industrial countries consists of long-duration joblessness.

The report's authors argue that many of the unemployed are "trapped" in their status by "disincentives"—that is, by benefits which are high in relation to the earnings they replace, were their recipients working. Their argument here is a bit hard to follow. Moreover, it is flawed inasmuch as low-pay work has become more prevalent in the OECD countries and, for many of the unemployed, may be the only work alternative. It is true, however, that only more stringent eligibility and job search requirements, which the report advocates, could compel broader acceptance of such work.

The net earnings replacement rate of unemployment (and certain other) benefits for a couple with one earner and two children averaged 68 percent of the average production worker's earnings in 1994 for all OECD countries. That was also the rate for the United States. Yet, the "most common" replacement rate, according to the report, has been 21–40 percent in such countries as the United States and Australia, so that earnings after taxes would be far higher for workers than what they would receive if unemployed. Thus, the report concludes that "few workers in any country will benefit financially from moving into unemployment."

Benefits other than unemployment compensation may further "undermine" work incentives, the report holds. Such benefits, which are not subject to the administrative controls conditioning unemployment compensation, include early retirement and worker compensation. Early retirement may be an unavoidable option for many older unemployed workers. The suspicion implied by the report that many recipients of worker compensation seek to avoid job search is not documented. In the United States, recipients of worker compensation 25–44 years old received $4,842 in 1995; those 44–65 years old received $6,941 (according to the U.S. Bureau of the Census, *Money Income in the United States, 1995).* These amounts, in the absence of earnings or other income, run below the poverty threshold of $7,929 for one person for that year. Thus, whether worker compensation represents a serious work disincentive for many persons is questionable.

An important barrier to work, according to the report, is the cost of childcare. When these costs are subtracted from, say, two-thirds of an average production worker's earnings (that is the upper limit of the low pay standard adopted by the report—see below), then income from social benefits replaces a large proportion, if not all, of what would be earnings. In the absence of informal childcare arrangements or childcare cost subsidies, this barrier to work may be insuperable.

The report's discussion of low-paid employment, however, portrays the more fundamental problem underlying high and long-duration unemployment, and declining labor force participation of working-age males. The authors define low pay as less than two-thirds of the median earnings of all full-time workers. (Median earnings of male full-time workers in the United States were $18,783 in 1995; of female workers, $13,562.) Their argument for this earnings standard is that "The risk of social exclusion or a sense of deprivation may be a function of the extent to which a worker's earnings fall below the median, even if subsistence needs can be met. This would be best captured by a relative measure of low pay." Some American scholars have maintained that "any family is poor whose income is less than one half the median family income." (See Alvin L. Schorr, *Common Decency: Do-*

mestic Policies After Reagan. New Haven, Yale University Press, 1986, quoting Victor Fuchs, p. 26.)

The incidence of low pay varies widely across OECD countries. The United States leads, with one-quarter of all full-time workers (aged 25 years old or more) receiving low wages, as defined. The United Kingdom and Canada also have high proportions of low-paid workers, as have New Zealand and Japan. Only three OECD countries count fewer than 10 percent of their full-time workers as low-paid—Belgium, Finland, and Sweden.

Female full-time workers are more likely to receive low pay than males. Yet, in countries where the incidence of low pay is comparatively low, it is probable that higher levels of minimum wages, broader collective bargaining coverage, greater trade union density, and higher wage floors created by higher unemployment and other benefits, exist.

The report presents detailed data on trends in earnings dispersion from 1979 to the mid-1990s. In one-half of the 16 countries for which the data are available, dispersion increased; in the other half, no clear trend emerged. ". . .(T)he United Kingdom and the United States stand out as the only countries where there has been a pronounced rise in earnings inequality." Among factors thought to generate that trend are skill-biased technical change; trade unions weakened by declining membership; competition from low-wage developing countries; and lack of qualifications of low-paid workers. However, such factors have also operated in economies with a lesser dispersion of earnings, such as France, Germany, and Sweden—where, however, more solidaristic wage policies have obtained.

The report complements its discussion of earnings inequality by a detailed examination of earnings mobility, here defining low pay as the bottom quintile of earnings. Thus, in 1991, the 1986 earnings status of bottom-quintile full-time workers had not changed for one-third of them in the eight countries for which data are presented (31 percent for the United States). Smaller proportions of formerly low-paid workers had moved to higher quintiles, with female workers, however, considerably lagging males. Significantly, the proportion of workers who had ceased to be employed full time in 1991 was very high—around 40 percent in the United States and Germany—female workers being more likely to exit full-time work, and probably the labor force altogether, than males.

Training and education, possibly practiced over the span of a working life, has been the most widely proposed remedy to overcome low pay and the resulting earnings dispersion. The report's chapter on the labor market problems of youth prefigures the perpetuation of low-pay status rather than its diminution. True, the proportion of men 18 years old and attending school rose from 49 percent in 1984 to 64 percent in 1994 (62 percent to 65 percent in the United States); for young women, the increase was more pronounced. But labor force participation and employment–population ratios among teenagers and young adults declined. The proportion of 18-year old men not employed, unemployed, and not attending school was one-third in the United States in 1994; for 22-year old men, it exceeded one-fifth. For young women, the rates were higher. In other OECD countries, with the notable exception of Germany, the pertinent rates also were high.

Lack of occupational prospects, together with low pay, surely contributed to the uncertain labor force status of many young adults. "(Y)oung workers experienced declines in earnings relative to older workers" in most OECD countries—declines that, in the United States, began in the 1970s and became more pronounced in the 1980s. Moreover, the expansion of "youth-intensive" industries—hotels, restaurants, retail trade—has perhaps not always offered desirable occupational prospects and tenure so as to make for a more lasting attachment by young workers.

The authors of the OECD report offer no way out of the low-pay or earnings dispersion problems. The reduction of earnings replacement rates of current unemployment and other benefits would if anything cement the low-earning status of many workers. The authors imply as much when they write that "One of the dilemmas facing policymakers is the possibility that policies designed to raise minimal standards for pay and other job characteristics may reduce the labour-market opportunities of low-skilled workers by 'pricing' them out of the labour market."

It should be noted that the OECD position is echoed, albeit more forcefully, in the 1994 White Paper of the European Commission. The Commission regards the current levels of public expenditure, particularly in the social field, as unsustainable; and asserts that "the constant rise in the labour cost—affecting both its wage and nonwage components . . . has hindered job creation." It urges the reduction of statutory charges on labor (borne mostly by employers), which in 1991 averaged 40 percent of GDP in the member countries of the European Community, as against 30 percent for the United States. It would reduce these charges by 1–2 percent of GDP, primarily by cutting family allowances, long-duration unemployment benefits, and minimal pensions; and it would focus the reduction on low-skilled jobs so as to encourage hiring. Thus, far-reaching entitlement restrictions appear to be in prospect—and attempts to carry them out are underway in a number of OECD countries—so as to cope with the problems on the supply side of labor markets. But whether the "risks of labor market exclusion" can so be countered remains an open question.

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Union radicalism

The American Fund for Public Service: Charles Garland and Radical Philanthropy, 1922–1941. By Gloria Garrett Sampson. Westport, CT, Green

wood Press, 1996, 263 pp., bibliography. $59.95.

Following the Russian Revolution, in 1918, capitalists, politicians, and even middle-class reformers worried about the influences of "bolshevism" on the rank-and file workers in factories, mills, and mines of the new industrial system. Even before this period, marked by World War I, Federal and State authorities passed laws limiting "free speech" in the context of political discourse. Members of the radical Industrial Workers of the World, so called Wobblies, faced imprisonment, beatings, and even deportation for espousing "unpatriotic" causes. In June 1917, the U.S. Government raided Wobbly offices across the Nation and basically ended their substantive existence. The radical movement weakened, but did not die. The American Fund for Public Service was an integral component of this new radicalism.

The American fund, ironically financed by an inheritance given to a wealthy Harvard dropout, Charles Garland, existed to finance anticapitalistic policies and programs. Its expressed mission was "to aid groups disadvantaged under the present conditions, especially industrial workers, farmers, and minority groups." Besides capitalists, the members of the Fund's executive board also incurred the hatred of Samuel Gompers and the American Federation of Labor. A special emphasis of the board was to support labor issues and organizations ideologically the opposite of Gomper's "collaborationist" group. As the author deftly notes, their paths crossed often, and the conflicts were counterproductive to the best interests of the working-class.

This book invokes memories of an epoch that few Americans know of today. It was a period where ideas for social reform of an exploitive industrial system emerged from a plethora of competing forces. Many of the programs and projects supported by the Fund were absorbed by the "mainstream" and seem noncontroversial today—a process the author calls "cultural hegemony." For example, the Fund aided IWW members imprisoned for exercising the constitutionally guaranteed right of free speech, something few Americans would tolerate today. Yet other efforts assisted by this group continue to divide Americans on philosophical and even moral grounds. The American Fund gave $13,500 to Margaret Sanger's American Birth Control League on the rationale that smaller families would improve the economic lot of impoverished workers.

The general ideological bent of the book itself harkens to an earlier period. It borrows from the "new left" historiography of the 1960s and 1970s. In fact, the thesis of the book draws heavily from the model established in Christopher Lasch's seminal work *The Agony of the American Left,* published in 1969. While this may alienate institutional historians and politically conservative readership, few individuals can deny the scholarship of the research. The bibliography alone, containing an impressive listing of manuscript holdings and oral history collections as well as traditional published sources, will be in demand by other researchers.

Students of labor and social causes will find the book contains a "who's who" of reformers and programs that still influence our social policies. In addition to Gompers and other middle-of-the-road labor leaders, there is William Z. Foster, a former AFL leader of the 1919 steel strike who is associated with the theory that radicalism can "bore from within" organizations like the AFL. One of the Fund's key board directors was Roger Baldwin, driving force behind the institutionalism of the American Civil Liberties Union. Another board member was Elizabeth Gurly Flynn, fiery labor leader immortalized by labor's troubadour, Joe Hill, as the "Rebel Girl." Another key figure was NAACP director James Weldon Johnson, who agonizingly fought to get the board more interested in civil rights causes.

As author Swanson also notes, Johnson was not alone in his frustration with the Fund. She has illustrated that a kaleidoscopic range of personal jealousies and competing egos existed between board members. Such internal disruption kindled poor administration, inconsistent and often limited disbursement of money, and plagued the Fund throughout its two decade existence. The confrontation between Gompers and the Fund precipitated the decline of radical A.J. Muste's Brookwood Labor College in Katonah, NY, as the school needed funding from both organizations for solvency—Brookwood Labor College tried to give workers education in politics, business, economics, performing arts, and other disciplines usually the domain of wealthy, university-degreed individuals.

Swanson's style and writing makes the book easy to read, but it is not for all audiences. Students of the labor movement, social reform, and radical politics will probably encompass the majority of readership. Government, labor, and education individuals might also find this book satisfying as many of the programs administered by State and Federal agencies have their origins in this era. For example, Dr. Alice Hamilton, who received funds, was a pioneer in occupational safety and health. Clinton Golden, board member and eventual member of the steelworkers union and William Johnston, early president of the machinists union and a socialist, both experimented with collaborationist labor-management relations.

There are a few minor errors in the book. Some inconsistencies are evident in Elizabeth Gurly Flynn's role in the Passaic Textile Strike of 1915, and Frances Perkins was Industrial Commissioner of New York State in the 1930s, not Secretary of State. But these incidents do not detract from a well-written and well-researched work. Once again history reminds us that new theories and ideas often have a broad legacy. In the 1920s the American Fund granted resources to the National Child Labor Committee to improve enforcement of child labor laws; in 1996 the National Child Labor Committee testified before a Labor De-

partment hearing on the lack of enforcement of child labor laws. A reader might ask himself—just how radical were those projects and programs?

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Tax reform proposals

Frontiers of Tax Reform. Edited by Michael J. Boskin. Washington, Hoover Institution Press, 1996, 202 pp.

Frontiers of Tax Reform is a detailed and thought-provoking compilation of essays derived from a May 1995 conference on tax reform in Washington, DC, sponsored by the Hoover Institution. The essays discuss the potential benefits from tax reform, the pros and cons of various tax reform alternatives, and the effects the implementation of alternative tax reform proposals would have on our economy and society. The authors include several policymakers within the Federal Government and economists from think-tanks and the academic community. The book is intended for those interested in ideas on how to change our current income-based tax structure.

The contributors to the book agree that tax reform is desirable given the many serious problems the current tax system poses. According to the consensus, our current system is far too complex, burdening those who comply with significant administrative costs. The system imposes excessive marginal effective tax rates that lack fairness. The incentive structure favors spending over savings and investment. Ultimately, the current system holds down the potential long-term economic growth of the United States.

Most of the alternative tax schemes presented in the book are offshoots of a basic consumption-based, rather than an income-based, tax system. Under a consumption-based system, both individuals and corporations would be taxed upon what they consume rather than what they earn. Such a system addresses a number of the current system's perceived problems. Consumption-based taxes reduce administrative costs and complexity, as well as provide incentives for personal saving, corporate investment, and entrepreneurship.

The alternative tax systems considered in the book, which address reforms in both individual and corporate taxation, are as follows:

- *National retail sales tax*—a flat percentage rate added on the retail price of all goods and services for both personal and business expenditures
- *Flat income-based tax*—for individuals, a flat percentage rate of personal labor income; for businesses, the same flat percentage rate of gross revenue minus the costs of inputs, capital goods, wages, and pension contributions
- *Flat consumption-based tax*—a flat percentage rate on income minus savings and investment
- *Value-added tax (VAT)*—a percentage of the value added, or the value of a good or service sold minus the value of the intermediate inputs purchased for that good or service, through various stages of production
- *Unlimited savings allowance (USA) tax*—progressive-rate income tax system applied to consumed income—that is, income minus net savings; for businesses, a single-rate VAT is imposed

Although books of multiple essays often are choppy and disorganized, the papers in *Frontiers* are cleanly structured into three broad topics—perspectives of tax reform, alternative tax reform proposals, and evaluating tax reform proposals—that help provide a cohesive flow. Most of the essays begin with clear overviews of the reform proposals, and then move on to support the propositions advanced with specific empirical evidence.

One area that lacked detailed analysis throughout is how to insure that the Federal Government will continue to generate the same level of revenue if a consumption-based tax is used. Many of the proposals set conditions that would generate identical revenue given current consumption patterns. However, under a consumption-based tax system, consumers and businesses have more control and flexibility to determine the amount of taxes they ultimately will pay. In some cases, it is unclear how expected changes in behavior would impact the ability of the tax system to generate revenue. Keep this question in mind as you read the essays: Is there a more significant chance that the revenue-generating ability of the Federal Government will fluctuate and/or be constrained from year to year under consumption-based systems?

Under the *Perspectives on Tax Reform* section, Michael Boskin, the book's editor, provides an excellent background discussion on tax reform in an essay entitled "A Framework for the Tax Reform Debate." Using clear language and understandable explanations, Boskin lays out a five-pronged test for evaluating tax reform proposals and argues heavily against our current tax system because it fails to provide incentives to save. His essay follows a basic introduction on goals of tax reform by Congressman Bill Archer.

Among the better essays in the *Alternative Tax Reform Proposals* section is "The Flat Tax: A Simple Progressive Consumption Tax," by Robert E. Hall and Alvin Rabushka. This detailed discussion of a flat consumption tax provides substantial support for its arguments, and explains a clear method of implementing the changes in the real world economy. Gilbert Metcalf makes a compelling argument based on both economic and social considerations to include a value-added tax in fundamental tax reform, given that the United States could learn from the experience

of other countries in implementing the VAT. Stephen Moore convincingly pushes tax reform focused on civil liberties merits as opposed to economic arguments.

The *Evaluating Tax Reform Proposals* section contains a thoughtful article by David F. Bradford that thoroughly examines fundamental transition issues contingent to implementing a consumption tax. Such an examination is critical because theories of alternative tax systems are of little use without a plan for implementing the reforms. Furthermore, the plan must have a reasonable chance of succeeding under the political climate that any tax reform would be presented. This section also contains passable explanations of how to provide appropriate information on tax reform, a look at a Federal retail sales tax, and the impact that fundamental tax reform would have on our economy.

After examining each of the proposals, consider the likelihood that any of them would be approved by two Houses of Congress and signed by the President. Although some essays make mention of it, many authors gloss over or do not address the issue of what reforms are politically feasible to implement versus what reforms could be implemented in an environment not constrained by the political process.

—Charles Muhl

Office of Publications
Bureau of Labor Statistics

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Notes on Labor Statistics 36

Comparative indicators

1. Labor market indicators 46
2. Annual and quarterly percent changes in compensation, prices, and productivity 47
3. Alternative measures of wages and compensation changes 47

Labor force data

4. Employment status of the population, seasonally adjusted 48
5. Selected employment indicators, seasonally adjusted 49
6. Selected unemployment indicators, seasonally adjusted 50
7. Duration of unemployment, seasonally adjusted 50
8. Unemployed persons by reason for unemployment, seasonally adjusted 51
9. Unemployment rates by sex and age, seasonally adjusted 51
10. Unemployment rates by States, seasonally adjusted 52
11. Employment of workers by States, seasonally adjusted 52
12. Employment of workers by industry, seasonally adjusted 53
13. Average weekly hours by industry, seasonally adjusted 55
14. Average hourly earnings by industry, seasonally adjusted 55
15. Average hourly earnings by industry 56
16. Average weekly earnings by industry 57
17. Diffusion indexes of employment change, seasonally adjusted 58
18. Annual data: Employment status of the population 58
19. Annual data: Employment levels by industry 59
20. Annual data: Average hours and earnings levels by industry 59

Labor compensation and collective bargaining data

21. Employment Cost Index, compensation, by occupation and industry group 60
22. Employment Cost Index, wages and salaries, by occupation and industry group 62
23. Employment Cost Index, benefits, private industry workers, by occupation and industry group 63
24. Employment Cost Index, private nonfarm workers, by bargaining status, region, and area size 64

Labor compensation and collective bargaining data—Continued

25. Participants in employer-provided benefit plans 65
26. Work stoppages involving 1,000 workers or more 66

Price data

27. Consumer Price Index: U.S. city average, by expenditure category and commodity and service groups 67
28. Consumer Price Index: U.S. city average and local data, all items 70
29. Annual data: Consumer Price Index, all items and major groups 71
30. Producer Price Indexes by stage of processing 72
31. Producer Price Indexes for the net output of major industry groups 73
32. Annual data: Producer Price Indexes by stage of processing 73
33. U.S. export price indexes by Standard International Trade Classification 74
34. U.S. import price indexes by Standard International Trade Classification 75
35. U.S. export price indexes by end-use category 76
36. U.S. import price indexes by end-use category 76
37. U.S.international price indexes for selected categories of services 77

Productivity data

38. Indexes of productivity, hourly compensation, and unit costs, data seasonally adjusted 77
39. Annual indexes of multifactor productivity 78
40. Annual indexes of productivity, hourly compensation, unit costs, and prices 78
41. Annual indexes of output per hour for selected industries 79

International comparisons data

42. Unemployment rates in nine countries, data seasonally adjusted 81
43. Annual data: Employment status of the civilian working-age population, 10 countries 82
44. Annual indexes of productivity and related measures, 12 countries 83

Injury and Illness data

45. Annual data: Occupational injury and illness incidence rates 84
46. Fatal occupational injuries by event or exposure, 1992–95 86

This section of the *Review* presents the principal statistical series collected and calculated by the Bureau of Labor Statistics: series on labor force; employment; unemployment; labor compensation; consumer, producer, and international prices; productivity; international comparisons; and injury and illness statistics. In the notes that follow, the data in each group of tables are briefly described; key definitions are given; notes on the data are set forth; and sources of additional information are cited.

General notes

The following notes apply to several tables in this section:

Seasonal adjustment. Certain monthly and quarterly data are adjusted to eliminate the effect on the data of such factors as climatic conditions, industry production schedules, opening and closing of schools, holiday buying periods, and vacation practices, which might prevent short-term evaluation of the statistical series. Tables containing data that have been adjusted are identified as "seasonally adjusted." (All other data are not seasonally adjusted.) Seasonal effects are estimated on the basis of past experience. When new seasonal factors are computed each year, revisions may affect seasonally adjusted data for several preceding years.

Seasonally adjusted data appear in tables 1–14, 16–17, 42, and 46. Seasonally adjusted labor force data in tables 1 and 4–9 were revised in the February 1997 issue of the *Review*. Seasonally adjusted establishment survey data shown in tables 1, 12–14 and 16–17 were revised in the July 1996 *Review* and reflect the experience through March 1996. A brief explanation of the seasonal adjustment methodology appears in "Notes on the data."

Revisions in the productivity data in table 42 are usually introduced in the September issue. Seasonally adjusted indexes and percent changes from month-to-month and quarter-to-quarter are published for numerous Consumer and Producer Price Index series. However, seasonally adjusted indexes are not published for the U.S. average All-Items CPI. Only seasonally adjusted percent changes are available for this series.

Adjustments for price changes. Some data—such as the "real" earnings shown in table 14—are adjusted to eliminate the effect of changes in price. These adjustments are made by dividing current-dollar values by the Consumer Price Index or the appropriate component of the index, then multiplying by 100. For example, given a current hourly wage rate of $3 and a current price index number of 150, where 1982 = 100, the hourly rate expressed in 1982 dollars is $2 ($3/150 x 100 = $2). The $2 (or any other resulting values) are described as "real," "constant," or "1982" dollars.

Sources of information

Data that supplement the tables in this section are published by the Bureau in a variety of sources. Definitions of each series and notes on the data are contained in later sections of these Notes describing each set of data. For detailed descriptions of each data series, see *BLS Handbook of Methods*, Bulletin 2414. Users also may wish to consult *Major Programs of the Bureau of Labor Statistics*, Report 871. News releases provide the latest statistical information published by the Bureau; the major recurring releases are published according to the schedule appearing on the back cover of this issue.

More information about labor force, employment, and unemployment data and the household and establishment surveys underlying the data are available in the Bureau's monthly publication, *Employment and Earnings*. Historical unadjusted and seasonally adjusted data from the household survey are available from the Bureau upon request. Historically comparable unadjusted and seasonally adjusted data from the establishment survey are published in *Employment, Hours, and Earnings, United States*, a BLS annual bulletin. Additional information on labor force data for sub-States are provided in the BLS annual report, *Geographic Profile of Employment and Unemployment.*

For a comprehensive discussion of the Employment Cost Index, see *Employment Cost Indexes and Levels, 1975–95*, BLS Bulletin 2466. The most recent data from the Employee Benefits Survey appear in the following Bureau of Labor Statistics bulletins: *Employee Benefits in Medium and Large Firms; Employee Benefits in Small Private Establishments; and Employee Benefits in State and Local Governments.*

More detailed data on consumer and producer prices are published in the monthly periodicals, *The CPI Detailed Report* and *Producer Price Indexes*. For an overview of the CPI reflecting 1982–84 expenditure patterns, see *The Consumer Price Index: 1987 Revision*, BLS Report 736. Additional data on international prices appear in monthly news releases.

For a listing of available industry productivity indexes and their components, see *Productivity Measures for Selected Industries and Government Services*, BLS Bulletin 2461.

For additional information on international comparisons data, see *International Comparisons of Unemployment*, BLS Bulletin 1979.

Detailed data on the occupational injury and illness series are published in *Occupational Injuries and Illnesses in the United States, by Industry*, a BLS annual bulletin.

Finally, the *Monthly Labor Review* carries analytical articles on annual and longer term developments in labor force, employment, and unemployment; employee compensation and collective bargaining; prices; productivity; international comparisons; and injury and illness data.

Symbols

n.e.c. = not elsewhere classified.
n.e.s. = not elsewhere specified.
p = preliminary. To increase the timeliness of some series, preliminary figures are issued based on representative but incomplete returns.
r = revised. Generally, this revision reflects the availability of later data, but also may reflect other adjustments.

Comparative Indicators

(Tables 1–3)

Comparative indicators tables provide an overview and comparison of major BLS statistical series. Consequently, although many of the included series are available monthly, all measures in these comparative tables are presented quarterly and annually.

Labor market indicators include employment measures from two major surveys and information on rates of change in compensation provided by the Employment Cost Index (ECI) program. The labor force participation rate, the employment-to-population ratio, and unemployment rates for major demographic groups based on the Current Population ("household") Survey are presented, while measures of employment and average weekly hours by major industry sector are given using nonfarm payroll data. The Employment Cost Index (compensation), by major sector and by bargaining status, is chosen from a variety of BLS compensation and wage measures because it provides a comprehensive measure of employer costs for hiring labor, not just outlays for wages, and

it is not affected by employment shifts among occupations and industries.

Data on **changes in compensation, prices, and productivity** are presented in table 2. Measures of rates of change of compensation and wages from the Employment Cost Index program are provided for all civilian nonfarm workers (excluding Federal and household workers) and for all private nonfarm workers. Measures of changes in consumer prices for all urban consumers; producer prices by stage of processing; overall prices by stage of processing; and overall export and import price indexes are given. Measures of productivity (output per hour of all persons) are provided for major sectors.

Alternative measures of wage and compensation rates of change, which reflect the overall trend in labor costs, are summarized in table 3. Differences in concepts and scope, related to the specific purposes of the series, contribute to the variation in changes among the individual measures.

Notes on the data

Definitions of each series and notes on the data are contained in later sections of these notes describing each set of data.

Employment and Unemployment Data

(Tables 1; 4–20)

Household survey data

Description of the series

EMPLOYMENT DATA in this section are obtained from the Current Population Survey, a program of personal interviews conducted monthly by the Bureau of the Census for the Bureau of Labor Statistics. The sample consists of about 50,000 households selected to represent the U.S. population 16 years of age and older. Households are interviewed on a rotating basis, so that three-fourths of the sample is the same for any 2 consecutive months.

Definitions

Employed persons include (1) all those who worked for pay any time during the week which includes the 12th day of the month or who worked unpaid for 15 hours or more in a family-operated enterprise and (2) those who were temporarily absent from their regular jobs because of illness, vacation, industrial dispute, or similar reasons. A person working at more than one job is counted only in the job at which he or she worked the greatest number of hours.

Unemployed persons are those who did not work during the survey week, but were available for work except for temporary illness and had looked for jobs within the preceding 4 weeks. Persons who did not look for work because they were on layoff are also counted among the unemployed. **The unemployment rate** represents the number unemployed as a percent of the civilian labor force.

The **civilian labor force** consists of all employed or unemployed persons in the civilian noninstitutional population. Persons **not in the labor force** are those not classified as employed or unemployed. This group includes discouraged workers, defined as persons who want and are available for a job and who have looked for work sometime in the the past 12 months (or since the end of their last job if they held one within the past 12 months), but are not currently looking, because they believe there are no jobs available or there are none for which they would qualify. The **civilian noninstitutional population** comprises all persons 16 years of age and older who are not inmates of penal or mental institutions, sanitariums, or homes for the aged, infirm, or needy. The **civilian labor force participation** rate is the proportion of the civilian noninstitutional population that is in the labor force. The **employment-population ratio** is employment as a percent of the civilian noninstitutional population.

Notes on the data

From time to time, and especially after a decennial census, adjustments are made in the Current Population Survey figures to correct for estimating errors during the intercensal years. These adjustments affect the comparability of historical data. A description of these adjustments and their effect on the various data series appears in the Explanatory Notes of *Employment and Earnings*.

Labor force data in tables 1 and 4–9 are seasonally adjusted. Since January 1980, national labor force data have been seasonally adjusted with a procedure called X-11 ARIMA which was developed at Statistics Canada as an extension of the standard X-11 method previously used by BLS. A detailed description of the procedure appears in the X-11 *ARIMA Seasonal Adjustment Method,* by Estela Bee Dagum (Statistics Canada, Catalogue No. 12-564E, January 1983).

At the end of each calendar year, historical seasonally adjusted data usually are revised, and projected seasonal adjustment factors are calculated for use during the January–June period. Because of the redesign of the survey, seasonally adjusted data back to 1994 usually are revised. In July, new seasonal adjustment factors, which incorporate the experience through June, are produced for the July–December period, but no revisions are made in the historical data.

FOR ADDITIONAL INFORMATION on national household survey data, contact the Division of Labor Force Statistics: (202) 606–6378.

Revisions to household data

Data relating to 1994 and subsequent years are not directly comparable with data for 1993 and earlier years because of the introduction of a major redesign of the survey questionnaire and collection methodology. (See the February 1994 issue of *Employment and Earnings*, a monthly publication of the Bureau of Labor Statistics.) Moreover, data for 1990 forward incorporate 1990 census-based population controls, adjusted for the estimated undercount. Additional information on the population revisions appears in the March 1996 issue of *Employment and Earnings*.

Establishment survey data

Description of the series

EMPLOYMENT, HOURS, AND EARNINGS DATA in this section are compiled from payroll records reported monthly on a voluntary basis to the Bureau of Labor Statistics and its cooperating State agencies by about 390,000 establishments representing all industries except agriculture. Industries are classified in accordance with the 1987 *Standard Industrial Classification (SIC) Manual.* In most industries, the sampling probabilities are based on the size of the establishment; most large establishments are therefore in the sample. (An establishment is not necessarily a firm; it may be a branch plant, for example, or warehouse.) Self-employed persons and others not on a regular civilian payroll are outside the scope of the survey because they are excluded from establishment records. This largely accounts for the difference in employment figures between the household and establishment surveys.

Definitions

An **establishment** is an economic unit which produces goods or services (such as a factory or store) at a single location and is engaged in one type of economic activity.

Employed persons are all persons who received pay (including holiday and sick pay) for any part of the payroll pe-

riod including the 12th day of the month. Persons holding more than one job (about 5 percent of all persons in the labor force) are counted in each establishment which reports them.

Production workers in manufacturing include working supervisors and nonsupervisory workers closely associated with production operations. Those workers mentioned in tables 11–16 include production workers in manufacturing and mining; construction workers in construction; and nonsupervisory workers in the following industries: transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for about four-fifths of the total employment on private nonagricultural payrolls.

Earnings are the payments production or nonsupervisory workers receive during the survey period, including premium pay for overtime or late-shift work but excluding irregular bonuses and other special payments. **Real earnings** are earnings adjusted to reflect the effects of changes in consumer prices. The deflator for this series is derived from the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

Hours represent the average weekly hours of production or nonsupervisory workers for which pay was received, and are different from standard or scheduled hours. **Overtime hours** represent the portion of average weekly hours which was in excess of regular hours and for which overtime premiums were paid.

The **Diffusion Index** represents the percent of industries in which employment was rising over the indicated period, plus one-half of the industries with unchanged employment; 50 percent indicates an equal balance between industries with increasing and decreasing employment. In line with Bureau practice, data for the 1-, 3-, and 6-month spans are seasonally adjusted, while those for the 12-month span are unadjusted. Data are centered within the span. Table 17 provides an index on private nonfarm employment based on 356 industries, and a manufacturing index based on 139 industries. These indexes are useful for measuring the dispersion of economic gains or losses and are also economic indicators.

Notes on the data

Establishment survey data are annually adjusted to comprehensive counts of employment (called "benchmarks"). The latest adjustment, which incorporated March 1995 benchmarks, was made with the release of May 1996 data, published in the July 1996 issue of the *Review*. Coincident with the benchmark adjustment, seasonally adjusted data were revised back to 1988 to reflect updated seasonal factors and new seasonal adjustment procedures. Unadjusted data from April 1995 forward and seasonally adjusted data from January 1992 forward are subject to revision in future benchmarks.

Revisions in State data (table 11) occurred with the publication of January 1996 data.

Beginning in June 1996, the BLS uses the X-12 ARIMA methodology to seasonally adjust establishment survey data. This procedure, developed by the Bureau of the Census, controls for the effect of varying survey intervals (also known as the 4- versus 5-week effect), thereby providing improved measurement of over-the-month changes and underlying economic trends. Revisions of data, usually for the most recent 5-year period, are made once a year coincident with the benchmark revisions.

In the establishment survey, estimates for the most recent 2 months are based on incomplete returns and are published as preliminary in the tables (12–17 in the *Review*). When all returns have been received, the estimates are revised and published as "final" (prior to any benchmark revisions) in the third month of their appearance. Thus, December data are published as preliminary in January and February and as final in March. For the same reasons, quarterly establishment data (table 1) are preliminary for the first 2 months of publication and final in the third month. Thus, fourth-quarter data are published as preliminary in January and February and as final in March.

A comprehensive discussion of the differences between household and establishment data on employment appears in Gloria P. Green, "Comparing employment estimates from household and payroll surveys," *Monthly Labor Review*, December 1969, pp. 9–20.

FOR ADDITIONAL INFORMATION on establishment survey data, contact the Division of Monthly Industry Employment Statistics: (202) 606–6555.

Unemployment data by State

Description of the series

Data presented in this section are obtained from the Local Area Unemployment Statistics (LAUS) program, which is conducted in cooperation with State employment security agencies.

Monthly estimates of the labor force, employment, and unemployment for States and sub-State areas are a key indicator of local economic conditions, and form the basis for determining the eligibility of an area for benefits under Federal economic assistance programs such as the Job Training Partnership Act. Seasonally adjusted unemployment rates are presented in table 10. Insofar as possible, the concepts and definitions underlying these data are those used in the national estimates obtained from the CPS.

Notes on the data

Data refer to State of residence. Monthly data for all States and the District of Columbia are derived using standardized procedures established by BLS. Once a year, estimates are revised to new population controls, usually with publication of January estimates, and benchmarked to annual average CPS levels.

FOR ADDITIONAL INFORMATION on data in this series, call (202) 606–6392 (table 10) or (202) 606–6589 (table 11).

Compensation and Wage Data

(Tables 1–3; 21–26)

COMPENSATION AND WAGE DATA are gathered by the Bureau from business establishments, State and local governments, labor unions, collective bargaining agreements on file with the Bureau, and secondary sources.

Employment Cost Index

Description of the series

The **Employment Cost Index** (ECI) is a quarterly measure of the rate of change in compensation per hour worked and includes wages, salaries, and employer costs of employee benefits. It uses a fixed market basket of labor—similar in concept to the Consumer Price Index's fixed market basket of goods and services—to measure change over time in employer costs of employing labor.

Statistical series on total compensation costs, on wages and salaries, and on benefit costs are available for private nonfarm workers excluding proprietors, the self-employed, and household workers. The total compensation costs and wages and salaries series are also available for State and local government workers and for the civilian nonfarm economy, which consists of private industry and State and local government workers combined. Federal workers are excluded.

The Employment Cost Index probability sample consists of about 4,400 private nonfarm establishments providing about 23,000 occupational observations and 1,000 State and local government establishments providing 6,000 occupational observations selected to represent total employment in each sector. On average, each reporting unit provides wage and compensation information on five

well-specified occupations. Data are collected each quarter for the pay period including the 12th day of March, June, September, and December.

Beginning with June 1986 data, fixed employment weights from the 1980 Census of Population are used each quarter to calculate the civilian and private indexes and the index for State and local governments. (Prior to June 1986, the employment weights are from the 1970 Census of Population.) These fixed weights, also used to derive all of the industry and occupation series indexes, ensure that changes in these indexes reflect only changes in compensation, not employment shifts among industries or occupations with different levels of wages and compensation. For the bargaining status, region, and metropolitan/nonmetropolitan area series, however, employment data by industry and occupation are not available from the census. Instead, the 1980 employment weights are reallocated within these series each quarter based on the current sample. Therefore, these indexes are not strictly comparable to those for the aggregate, industry, and occupation series.

Definitions

Total compensation costs include wages, salaries, and the employer's costs for employee benefits.

Wages and salaries consist of earnings before payroll deductions, including production bonuses, incentive earnings, commissions, and cost-of-living adjustments.

Benefits include the cost to employers for paid leave, supplemental pay (including nonproduction bonuses), insurance, retirement and savings plans, and legally required benefits (such as Social Security, workers' compensation, and unemployment insurance).

Excluded from wages and salaries and employee benefits are such items as payment-in-kind, free room and board, and tips.

Notes on the data

The Employment Cost Index for changes in wages and salaries in the private nonfarm economy was published beginning in 1975. Changes in total compensation cost—wages and salaries and benefits combined—were published beginning in 1980. The series of changes in wages and salaries and for total compensation in the State and local government sector and in the civilian nonfarm economy (excluding Federal employees) were published beginning in 1981. Historical indexes (June 1981 = 100) of the quarterly rates of change are presented in the March issue of the BLS quarterly, *Compensation and Working Conditions*.

FOR ADDITIONAL INFORMATION on the Employment Cost Index, contact the Division of Employment Cost Trends: (202) 606–6199.

Employee Benefits Survey

Description of the series

Employee benefits data are obtained from the Employee Benefits Survey, an annual survey of the incidence and provisions of selected benefits provided by employers. The survey collects data from a sample of approximately 6,000 private sector and State and local government establishments. The data are presented as a percentage of employees who participate in a certain benefit, or as an average benefit provision (for example, the average number of paid holidays provided to employees per year). Selected data from the survey are presented in table 25.

The survey covers paid leave benefits such as lunch and rest periods, holidays and vacations, and personal, funeral, jury duty, military, parental, and sick leave; sickness and accident, long-term disability, and life insurance; medical, dental, and vision care plans; defined benefit and defined contribution plans; flexible benefits plans; reimbursement accounts; and unpaid parental leave.

Also, data are tabulated on the incidence of several other benefits, such as severance pay, child-care assistance, wellness programs, and employee assistance programs.

Definitions

Employer-provided benefits are benefits that are financed either wholly or partly by the employer. They may be sponsored by a union or other third party, as long as there is some employer financing. However, some benefits that are fully paid for by the employee also are included. For example, long-term care insurance and postretirement life insurance paid entirely by the employee are included because the guarantee of insurability and availability at group premium rates are considered a benefit.

Participants are workers who are covered by a benefit, whether or not they use that benefit. If the benefit plan is financed wholly by employers and requires employees to complete a minimum length of service for eligibility, the workers are considered participants whether or not they have met the requirement. If workers are required to contribute towards the cost of a plan, they are considered participants only if they elect the plan and agree to make the required contributions.

Defined benefit pension plans use predetermined formulas to calculate a retirement benefit, and obligate the employer to provide those benefits. Benefits are generally based on salary, years of service, or both.

Defined contribution plans generally specify the level of employer and employee contributions to a plan, but not the formula for determining eventual benefits. Instead, individual accounts are set up for participants, and benefits are based on amounts credited to these accounts.

Tax-deferred savings plans are a type of defined contribution plan that allow participants to contribute a portion of their salary to an employer-sponsored plan and defer income taxes until withdrawal.

Flexible benefit plans allow employees to choose among several benefits, such as life insurance, medical care, and vacation days, and among several levels of care within a given benefit.

Notes on the data

Surveys of employees in medium and large establishments conducted over the 1979–86 period included establishments that employed at least 50, 100, or 250 workers, depending on the industry (most service industries were excluded). The survey conducted in 1987 covered only State and local governments with 50 or more employees. The surveys conducted in 1988 and 1989 included medium and large establishments with 100 workers or more in private industries. All surveys conducted over the 1979–89 period excluded establishments in Alaska and Hawaii, as well as part-time employees.

Beginning in 1990, surveys of State and local governments and small establishments are conducted in even-numbered years and surveys of medium and large establishments are conducted in odd-numbered years. The small establishment survey includes all private nonfarm establishments with fewer than 100 workers, while the State and local government survey includes all governments, regardless of the number of workers. All three surveys include full- and part-time workers, and workers in all 50 States and the District of Columbia.

FOR ADDITIONAL INFORMATION on the Employee Benefits Survey, contact the Division of Occupational Pay and Employee Benefit Levels: (202) 606–6222.

Work stoppages

Description of the series

Data on work stoppages measure the number and duration of major strikes or lockouts (involving 1,000 workers or more) occurring

during the month (or year), the number of workers involved, and the amount of time lost because of stoppage.

Data are largely from newspaper accounts and cover only establishments directly involved in a stoppage. They do not measure the indirect or secondary effect of stoppages on other establishments whose employees are idle owing to material shortages or lack of service.

Definitions

Number of stoppages: The number of strikes and lockouts involving 1,000 workers or more and lasting a full shift or longer.

Workers involved: The number of workers directly involved in the stoppage.

Number of days idle: The aggregate number of workdays lost by workers involved in the stoppages.

Days of idleness as a percent of estimated working time: Aggregate workdays lost as a percent of the aggregate number of standard workdays in the period multiplied by total employment in the period.

Notes on the data

This series is not comparable with the one terminated in 1981 that covered strikes involving six workers or more.

FOR ADDITIONAL INFORMATION on work stoppages data, contact the Division of Developments in Labor–Management Relations: (202) 606–6275.

Price Data

(Tables 2; 27–37)

PRICE DATA are gathered by the Bureau of Labor Statistics from retail and primary markets in the United States. Price indexes are given in relation to a base period—1982 = 100 for many Producer Price Indexes, 1982–84 = 100 for many Consumer Price Indexes (unless otherwise noted), and 1990 = 100 for International Price Indexes.

Consumer Price Indexes

Description of the series

The **Consumer Price Index** (CPI) is a measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services. The CPI is calculated monthly for two population groups, one consisting only of urban households whose primary source of income is derived from the employment of wage earners and clerical workers, and the other consisting of all urban households. The wage earner index (CPI-W) is a continuation of the historic index that was introduced well over a half-century ago for use in wage negotiations. As new uses were developed for the CPI in recent years, the need for a broader and more representative index became apparent. The all-urban consumer index (CPI-U), introduced in 1978, is representative of the 1982–84 buying habits of about 80 percent of the noninstitutional population of the United States at that time, compared with 32 percent represented in the CPI-W. In addition to wage earners and clerical workers, the CPI-U covers professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, retirees, and others not in the labor force.

The CPI is based on prices of food, clothing, shelter, fuel, drugs, transportation fares, doctors' and dentists' fees, and other goods and services that people buy for day-to-day living. The quantity and quality of these items are kept essentially unchanged between major revisions so that only price changes will be measured. All taxes directly associated with the purchase and use of items are included in the index.

Data collected from more than 19,000 retail establishments and 57,000 housing units in 85 urban areas across the country are used to develop the "U.S. city average." Separate estimates for 15 major urban centers are presented in table 28. The areas listed are as indicated in footnote 1 to the table. The area indexes measure only the average change in prices for each area since the base period, and do not indicate differences in the level of prices among cities.

Notes on the data

In January 1983, the Bureau changed the way in which homeownership costs are meaured for the CPI-U. A rental equivalence method replaced the asset-price approach to homeownership costs for that series. In January 1985, the same change was made in the CPI-W. The central purpose of the change was to separate shelter costs from the investment component of home-ownership so that the index would reflect only the cost of shelter services provided by owner-occupied homes. An updated CPI-U and CPI-W were introduced with release of the January 1987 data.

FOR ADDITIONAL INFORMATION on consumer prices, contact the Division of Consumer Prices and Price Indexes: (202) 606–7000.

Producer Price Indexes

Description of the series

Producer Price Indexes (PPI) measure average changes in prices received by domestic producers of commodities in all stages of processing. The sample used for calculating these indexes currently contains about 3,200 commodities and about 80,000 quotations per month, selected to represent the movement of prices of all commodities produced in the manufacturing; agriculture, forestry, and fishing; mining; and gas and electricity and public utilities sectors. The stage-of-processing structure of PPI organizes products by class of buyer and degree of fabrication (that is, finished goods, intermediate goods, and crude materials). The traditional commodity structure of PPI organizes products by similarity of end use or material composition. The industry and product structure of PPI organizes data in accordance with the Standard Industrial Classification (SIC) and the product code extension of the SIC developed by the U.S. Bureau of the Census.

To the extent possible, prices used in calculating Producer Price Indexes apply to the first significant commercial transaction in the United States from the production or central marketing point. Price data are generally collected monthly, primarily by mail questionnaire. Most prices are obtained directly from producing companies on a voluntary and confidential basis. Prices generally are reported for the Tuesday of the week containing the 13th day of the month.

Since January 1992, price changes for the various commodities have been averaged together with implicit quantity weights representing their importance in the total net selling value of all commodities as of 1987. The detailed data are aggregated to obtain indexes for stage-of-processing groupings, commodity groupings, durability-of-product groupings, and a number of special composite groups. All Producer Price Index data are subject to revision 4 months after original publication.

FOR ADDITIONAL INFORMATION on producer prices, contact the Division of Industrial Prices and Price Indexes: (202) 606–7705.

International Price Indexes

Description of the series

The **International Price Program** produces monthly and quarterly export and import price indexes for nonmilitary goods traded between the United States and the rest of the world. The export price index provides a measure of price change for all products sold by U.S. residents to foreign buyers. ("Residents" is defined as in the national income accounts; it includes corporations, businesses, and individuals, but does not require the organizations to be U.S. owned nor the individuals to have U.S. citizenship.) The

import price index provides a measure of price change for goods purchased from other countries by U.S. residents.

The product universe for both the import and export indexes includes raw materials, agricultural products, semifinished manufactures, and finished manufactures, including both capital and consumer goods. Price data for these items are collected primarily by mail questionnaire. In nearly all cases, the data are collected directly from the exporter or importer, although in a few cases, prices are obtained from other sources.

To the extent possible, the data gathered refer to prices at the U.S. border for exports and at either the foreign border or the U.S. border for imports. For nearly all products, the prices refer to transactions completed during the first week of the month. Survey respondents are asked to indicate all discounts, allowances, and rebates applicable to the reported prices, so that the price used in the calculation of the indexes is the actual price for which the product was bought or sold.

In addition to general indexes of prices for U.S. exports and imports, indexes are also published for detailed product categories of exports and imports. These categories are defined according to the five-digit level of detail for the Bureau of Economic Analysis End-use Classification (SITC), and the four-digit level of detail for the Harmonized System. Aggregate import indexes by country or region of origin are also available.

BLS publishes indexes for selected categories of internationally traded services, calculated on an international basis and on a balance-of-payments basis.

Notes on the data

The export and import price indexes are weighted indexes of the Laspeyres type. Price relatives are assigned equal importance within each harmonized group and are then aggregated to the higher level. The values assigned to each weight category are based on trade value figures compiled by the Bureau of the Census. The trade weights currently used to compute both indexes relate to 1990.

Because a price index depends on the same items being priced from period to period, it is necessary to recognize when a product's specifications or terms of transaction have been modified. For this reason, the Bureau's questionnaire requests detailed descriptions of the physical and functional characteristics of the products being priced, as well as information on the number of units bought or sold, discounts, credit terms, packaging, class of buyer or seller, and so forth. When there are changes in either the specifications or terms of transaction of a product, the dollar value of each change is deleted from the total price change to obtain the "pure" change. Once this value is determined, a linking procedure is employed which allows for the continued repricing of the item.

For the export price indexes, the preferred pricing is f.a.s. (free alongside ship) U.S. port of exportation. When firms report export prices f.o.b. (free on board), production point information is collected which enables the Bureau to calculate a shipment cost to the port of exportation. An attempt is made to collect two prices for imports. The first is the import price f.o.b. at the foreign port of exportation, which is consistent with the basis for valuation of imports in the national accounts. The second is the import price c.i.f.(costs, insurance, and freight) at the U.S. port of importation, which also includes the other costs associated with bringing the product to the U.S. border. It does not, however, include duty charges. For a given product, only one price basis series is used in the construction of an index.

FOR ADDITIONAL INFORMATION on international prices, contact the Division of International Prices: (202) 606–7155.

Productivity Data

(Tables 2; 38–41)

Business sector and major sectors

Description of the series

The productivity measures relate real output to real input. As such, they encompass a family of measures which include single-factor input measures, such as output per unit of labor input (output per hour) or output per unit of capital input, as well as measures of multifactor productivity (output per unit of combined labor and capital inputs). The Bureau indexes show the change in output relative to changes in the various inputs. The measures cover the business, nonfarm business, manufacturing, and nonfinancial corporate sectors.

Corresponding indexes of hourly compensation, unit labor costs, unit nonlabor payments, and prices are also provided.

Definitions

Output per hour of all persons (labor productivity) is the quantity of goods and services produced per hour of labor input. **Output per unit of capital services** (capital productivity) is the quantity of goods and services produced per unit of capital services input. **Multifactor productivity** is the quantity of goods and services produced per combined unit of labor and capital inputs.

Compensation per hour is total compensation divided by hours at work. Total compensation equals the wages and salaries of employees plus employers' contributions for social insurance and private benefit plans, plus an estimate of these payments for the self-employed (except for nonfinancial corporations in which there are no self-employed). **Real compensation per hour** is compensation per hour deflated by the change in the Consumer Price Index for All Urban Consumers.

Unit labor costs are the labor compensation costs expended in the production of a unit of output and are derived by dividing compensation by output. **Unit nonlabor payments** include profits, depreciation, interest, and indirect taxes per unit of output. They are computed by subtracting compensation of all persons from current-dollar value of output and dividing by output.

Unit nonlabor costs contain all the components of unit nonlabor payments except unit profits.

Unit profits include corporate profits with inventory valuation and capital consumption adjustments per unit of output.

Hours of all persons are the total hours at work of payroll workers, self-employed persons, and unpaid family workers.

Labor inputs are hours of all persons adjusted for the effects of changes in the education and experience of the labor force.

Capital services are the flow of services from the capital stock used in production. It is developed from measures of the net stock of physical assets—equipment, structures, land, and inventories—weighted by rental prices for each type of asset.

Combined units of labor and capital inputs are derived by combining changes in labor and capital input with weights which represent each component's share of total output. The indexes for capital services, labor inputs, and combined units of labor and capital are based on changing weights which are averages of the shares in the current and preceding year (the Tornquist index-number formula).

Notes on the data

Business sector output is an annually-weighted index constructed by excluding from real gross domestic product (GDP) the following outputs: general government, nonprofit institutions, paid employees of private households, and the rental value of owner-occupied dwellings. Nonfarm business also excludes farming. Private business and private nonfarm business further exclude government enterprises. The measures are supplied by the U.S. Department of Commerce's Bureau of Economic Analysis. Annual estimates of manufacturing sectoral

output are produced by the Bureau of Labor Statistics. Quarterly manufacturing output indexes from the Federal Reserve Board are adjusted to these annual output measures by the BLS. Compensation data are developed from data of the Bureau of Economic Analysis and the Bureau of Labor Statistics. Hours data are developed from data of the Bureau of Labor Statistics.

The productivity and associated cost measures in tables 38–41 describe the relationship between output in real terms and the labor and capital inputs involved in its production. They show the changes from period to period in the amount of goods and services produced per unit of input.

Although these measures relate output to hours and capital services, they do not measure the contributions of labor, capital, or any other specific factor of production. Rather, they reflect the joint effect of many influences, including changes in technology; shifts in the composition of the labor force; capital investment; level of output; changes in the utilization of capacity, energy, material, and research and development; the organization of production; managerial skill; and characteristics and efforts of the work force.

FOR ADDITIONAL INFORMATION on this productivity series, contact the Division of Productivity Research: (202) 606–5606.

Industry productivity measures

Description of the series

The BLS industry productivity data supplement the measures for the business economy and major sectors with annual measures of labor productivity for selected industries at the three- and four-digit levels of the Standard Industrial Classification system. The industry measures differ in methodology and data sources from the productivity measures for the major sectors because the industry measures are developed independently of the National Income and Product Accounts framework used for the major sector measures.

Definitions

Output per employee hour is derived by dividing an index of industry output by an index of aggregate hours of all employees. Output indexes are based on quantifiable units of products or services, or both, combined with value-share weights. Whenever possible, physical quantities are used as the unit of measurement for output. If quantity data are not available for a given industry, data on the constant-dollar value of production are used.

The **labor input** series consist of the hours of all employees (production and nonproduction workers), the hours of all persons (paid employees, partners, proprietors, and unpaid family workers), or the number of employees, depending upon the industry.

Notes on the data

The industry measures are compiled from data produced by the Bureau of Labor Statistics, the Departments of Commerce, Interior, and Agriculture, the Federal Reserve Board, regulatory agencies, trade associations, and other sources.

For most industries, the productivity indexes refer to the output per hour of all employees. For some transportation industries, only indexes of output per employee are prepared. For some trade and service industries, indexes of output per hour of all persons (including self-employed) are constructed.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Industry Productivity Studies: (202) 606–5618.

International Comparisons

(Tables 42–44)

Labor force and unemployment

Description of the series

Tables 42 and 43 present comparative measures of the labor force, employment, and unemployment—approximating U.S. concepts—for the United States, Canada, Australia, Japan, and several European countries. The unemployment statistics (and, to a lesser extent, employment statistics) published by other industrial countries are not, in most cases, comparable to U.S. unemployment statistics. Therefore, the Bureau adjusts the figures for selected countries, where necessary, for all known major definitional differences. Although precise comparability may not be achieved, these adjusted figures provide a better basis for international comparisons than the figures regularly published by each country.

Definitions

For the principal U.S. definitions of the **labor force**, **employment**, and **unemployment**, see the Notes section on Employment and Unemployment Data: Household survey data.

Notes on the data

The adjusted statistics have been adapted to the age at which compulsory schooling ends in each country, rather than to the U.S. standard of 16 years of age and older. Therefore, the adjusted statistics relate to the population aged 16 and older in France, Sweden, and the United Kingdom; 15 and older in Canada, Australia, Japan, Germany, Italy from 1993 onward, and the Netherlands; and 14 and older in Italy prior to 1993. The institutional population is included in the denominator of the labor force participation rates and employment-population ratios for Japan and Germany; it is excluded for the United States and the other countries.

In the U.S. labor force survey, persons on layoff who are awaiting recall to their jobs are classified as unemployed. European and Japanese layoff practices are quite different in nature from those in the United States; therefore, strict application of the U.S. definition has not been made on this point. For further information, see *Monthly Labor Review*, December 1981, pp. 8–11.

The figures for one or more recent years for France, Germany, Italy, the Netherlands, and the United Kingdom are calculated using adjustment factors based on labor force surveys for earlier years and are considered preliminary. The recent-year measures for these countries, therefore, are subject to revision whenever data from more current labor force surveys become available.

There are breaks in the data series for the United States (1990, 1994), France (1992), Italy (1991, 1993), the Netherlands (1988), and Sweden (1987).

For the United States, the break in series reflects a major redesign of the labor force survey questionnaire and collection methodology introduced in January 1994. Revised population estimates based on the 1990 Census, adjusted for the estimated undercount, also were incorporated. In 1996, previously published data for the 1990–1993 period were revised to reflect the 1990 census-based population controls, adjusted for the undercount. Therefore, data for 1994 onward are not directly comparable with data for 1993 and earlier years because of the redesign, and data for 1990 onward are not directly comparable with data for 1989 and earlier years because of the introduction of the 1990 census-based population controls, adjusted for the undercount. See the Notes section on Employment and Unemployment Data of this *Review*.

For France, the 1992 break reflects the substitution of standardized European Union Statistical Office (EUROSTAT) unemployment statistics for the unemployment data estimated according to the International Labor

Office (ILO) definition and published in the Organization for Economic Cooperation and Development (OECD) annual yearbook and quarterly update. This change was made because the EUROSTAT data are more up-to-date than the OECD figures. Also, since 1992, the EUROSTAT definitions are closer to the U.S. definitions than they were in prior years. The impact of this revision was to lower the unemployment rate by 0.1 percentage point in 1992 and 1993, by 0.4 percentage point in 1994, and 0.6 percentage point in 1995.

For Italy, the 1991 break reflects a revision in the method of weighting sample data. The impact was to increase the unemployment rate by approximately 0.3 percentage point, from 6.6 to 6.9 percent in 1991.

In October 1992, the survey methodology was revised and the definition of unemployment was changed to include only those who were actively looking for a job within the 30 days preceding the survey and who were available for work. In addition, the lower age limit for the labor force was raised from 14 to 15 years. (Prior to these changes, BLS adjusted Italy's published unemployment rate downward by excluding from the unemployed those persons who had not actively sought work in the past 30 days.) The break in the series also reflects the incorporation of the 1991 population census results. The impact of these changes was to raise Italy's adjusted unemployment rate by approximately 1.2 percentage points, from 8.3 to 9.5 percent in fourth-quarter 1992. These changes did not affect employment significantly, except in 1993. Estimates by the Italian Statistical Office indicate that employment declined by about 3 percent in 1993, rather than the nearly 4 percent indicated by the data shown in table 43. This difference is attributable mainly to the incorporation of the 1991 population benchmarks in the 1993 data. Data for earlier years have not been adjusted to incorporate the 1991 census results.

For the Netherlands, a new survey questionnaire was introduced in 1992 that allowed for a closer application of ILO guidelines. EUROSTAT has revised the Dutch series back to 1988 based on the 1992 changes. The 1988 revised unemployment rate is 7.6 percent; the previous estimate for the same year was 9.3 percent.

There have been two breaks in series in the Swedish labor force survey, in 1987 and 1993. Adjustments have been made for the 1993 break back to 1987. In 1987, a new questionnaire was introduced. Questions regarding current availability were added and the period of active workseeking was reduced from 60 days to 4 weeks. These changes lowered Sweden's 1987 unemployment rate by 0.4 percentage point, from 2.3 to 1.9 percent. In 1993, the measurement period for the labor force survey was changed to represent all 52 weeks of the year rather than one week each month and a new adjustment for population totals was introduced. The impact was to raise the unemployment rate by approximately 0.5 percentage point, from 7.6 to 8.1 percent. Statistics Sweden revised its labor force survey data for 1987–1992 to take into account the break in 1993. The adjustment raised the Swedish unemployment rate by 0.2 percentage point in 1987 and gradually rose to 0.5 percentage point in 1992.

Beginning with 1987, BLS has adjusted the Swedish data to classify students who also sought work as unemployed. The impact of this change was to increase the adjusted unemployment rate by 0.1 percentage point in 1987 and by 1.8 percentage points in 1994, when unemployment was higher. By 1994, the adjusted unemployment rate had risen from 7.8 to 9.6 percent due to the adjustment to include students.

The net effect of the 1987 and 1993 changes and the BLS adjustment for students seeking work lowered Sweden's 1987 unemployment rate from 2.3 to 2.2 percent.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Foreign Labor Statistics: (202) 606–5654.

Manufacturing productivity and labor costs

Description of the series

Table 44 presents comparative measures of manufacturing labor productivity (output per hour), hourly compensation costs, and unit labor costs for the United States, Canada, Japan, and nine European countries. These measures are limited to trend comparisons—that is, intercountry series of changes over time—rather than level comparisons because reliable international comparisons of the levels of manufacturing output are unavailable. BLS constructs these comparative indexes from three basic aggregative measures—output, total labor hours, and total compensation. The hours and compensation measures refer to all employed persons, including self-empoyed persons and unpaid family workers, in the United States, Canada, Japan, France, Germany, Norway, and Sweden, and to all employees (wage and salary earners) in the other countries. The figures for Canada are the official measures prepared by Statistics Canada.

Definitions

Output, in general, refers to value added in manufacturing (gross product originating) in constant prices from the national accounts of each country. However, output for Japan prior to 1970 and the Netherlands from 1969 to 1977 are indexes of industrial production. The national accounts measures for the United Kingdom are essentially identical to its indexes of industrial production. While methods of deriving national accounts measures differ substantially from country to country, the use of different procedures does not, in it-self, connote lack of comparability—rather, it reflects differences among countries in the availability and reliability of underlying data series.

The price base years used to measure real output and the frequency and method of changing price weights differ among the countries, and this can lead to differences in real output growth rates. The real manufacturing output data currently being used for the United States are 1987 fixed-price-weighted measures; they are available only from 1977 forward. With the exception of Japan, which uses fixed-weighted measures for long periods, the foreign countries covered in BLS series link fixed-weighted measures covering various periods, although the methods used differ. The measures for Norway for 1987–92 are annual chain-linked measures based on relative prices of the preceding year.

Hours refer to hours worked in all countries. The measures are developed from statistics of manufacturing employment and average hours. The series used for France (from 1970 forward), Norway, and Sweden are official series published with the national accounts. Where official total hours series are not available, the measures are developed by BLS using employment figures published with the national accounts, or other comprehensive employment series, and estimates of annual hours worked. For Germany, BLS uses estimates of average hours worked developed by a research institute connected with the Ministry of Labor for use with the national accounts employment figures. For the other countries, BLS constructs its own estimates of average hours.

Compensation (labor cost) includes all payments in cash or kind made directly to employees plus employer expenditures for legally required insurance programs and contractual and private benefit plans. For France and Sweden, compensation is increased to account for other significant payroll taxes, even if they are not for the direct benefit of workers, because such taxes are regarded as labor costs. For the United Kingdom, compensation is reduced for the years 1967–91 to account for employment susidies. However, compensation does not include all items of labor costs. The costs of recruitment, employee training, and plant facilities and services—such as cafeterias and medical clinics—are not covered because data are not available for most countries. The compensation measures are from the national accounts, except those for Bel-

gium, which are developed by BLS using statistics on employment, average hours, and hourly compensation. Self-employed workers are included in the all employed persons measures assuming that their hourly compensation is equal to the average for wage and salary employees.

Notes on the data

In general, the measures relate to total manufacturing as defined by the International Standard Industrial Classification. However, the measures for France and Italy (beginning 1970), refer to mining and manufacturing less energy-related products; the measures for Denmark include mining and exclude manufacturing handicrafts from 1960 to 1966; and the measures for the Netherlands exclude petroleum refining and include coal mining from 1969 to 1976.

The figures for one or more recent years may be based on current indicators of manufacturing output (such as industrial production indexes), employment, average hours, and hourly compensation and are considered preliminary until the national accounts and other statistics used for the long-term measures becomes available.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Foreign Labor Statistics: (202) 606–5654.

Occupational Injury and Illness Data

(Table 45)

Survey of Occupational Injuries and Illnesses

Description of the series

The Survey of Occupational Injuries and Illnesses collects data from employers about their workers' job-related nonfatal injuries and illnesses. The information that employers provide is based on records that they maintain under the Occupational Safety and Health Act of 1970. Self-employed individuals, farms with fewer than 11 employees, employers regulated by other Federal safety and health laws, and Federal, State, and local government agencies are excluded from the survey.

The survey is a Federal-State cooperative program with an independent sample selected for each participating State. A stratified random sample with a Neyman allocation is selected to represent all private industries in the State. The survey is stratified by Standard Industrial Classification (SIC) and size of employment.

Definitions

Under the Occupational Safety and Health Act, employers maintain records of nonfatal work-related injuries and illnesses that involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment other than first aid.

Occupational injury is any injury such as a cut, fracture, sprain, or amputation that results from a work-related event or a single, instantaneous exposure in the work environment.

Occupational illness is an abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to factors associated with employment. It includes acute and chronic illnesses or disease which may be caused by inhalation, absorption, ingestion, or direct contact.

Lost workday injuries and illnesses are cases that involve days away from work, or days of restricted work activity, or both.

Lost workdays include the number of workdays (consecutive or not) on which the employee was either away from work or at work in some restricted capacity, or both, because of an occupational injury or illness. BLS measures of the number and incidence rate of lost workdays were discontinued beginning with the 1993 survey. The number of days away from work or days of restricted work activity does not include the day of injury or onset of illness or any days on which the employee would not have worked, such as a Federal holiday, even though able to work.

Incidence rates are computed as the number of injuries and/or illnesses or lost work days per 100 full-time workers.

Notes on the data

The definitions of occupational injuries and illnesses are from *Recordkeeping Guidelines for Occupational Injuries and Illnesses* (U.S. Department of Labor, Bureau of Labor Statistics, September 1986).

Estimates are made for industries and employment size classes for total recordable cases, lost workday cases, days away from work cases, and nonfatal cases without lost workdays. These data also are shown separately for injuries. Illness data are available for seven categories: Occupational skin diseases or disorders, dust diseases of the lungs, respiratory conditions due to toxic agents, poisoning (systemic effects of toxic agents), disorders due to physical agents (other than toxic materials), disorders associated with repeated trauma, and all other occupational illnesses.

The survey continues to measure the number of new work-related illness cases which are recognized, diagnosed, and reported during the year. Some conditions, for example, long-term latent illnesses caused by exposure to carcinogens, often are difficult to relate to the workplace and are not adequately recognized and reported. These long-term latent illnesses are believed to be understated in the survey's illness measure. In contrast, the overwhelming majority of the reported new illnesses are those which are easier to directly relate to workplace activity (for example., contact dermatitis and carpal tunnel syndrome).

Most of the estimates are in the form of incidence rates, defined as the number of injuries and illnesses per 100 equivalent full-time workers. For this purpose, 200,000 employee hours represent 100 employee years (2,000 hours per employee). Full detail on the available measures is presented in the annual bulletin, *Occupational Injuries and Illnesses: Counts, Rates, and Characteristics.*

Comparable data for more than 40 States and territories are available from the BLS Office of Safety, Health and Working Conditions. Many of these States publish data on State and local government employees in addition to private industry data.

Mining and railroad data are furnished to BLS by the Mine Safety and Health Administration and the Federal Railroad Administration. Data from these organizations are included in both the national and State data published annually.

With the 1992 survey, BLS began publishing details on serious, nonfatal incidents resulting in days away from work. Included are some major characteristics of the injured and ill workers, such as occupation, age, gender, race, and length of service, as well as the circumstances of their injuries and illnesses (nature of the disabling condition, part of body affected, event and exposure, and the source directly producing the condition). In general, these data are available nationwide for detailed industries and for individual States at more aggregated industry levels.

FOR ADDITIONAL INFORMATION on occupational injuries and illnesses, contact the *Office of Occupational Safety, Health and Working Conditions* at (202) 606–6180, or access the BLS Internet site at: http://www.bls.gov/oshhome.htm.

Census of Fatal Occupational Injuries

(Table 46)

The Census of Fatal Occupational Injuries compiles a complete roster of fatal job-related injuries, including detailed data about the fatally injured workers and the fatal events. The program collects and cross checks fatality information from multiple

sources, including death certificates, State and Federal workers' compensation reports, Occupational Safety and Health Administration and Mine Safety and Health Administration records, medical examiner and autopsy reports, media accounts, State motor vehicle fatality records, and follow-up questionnaires to employers.

In addition to private wage and salary workers, the self-employed, family members, and Federal, State, and local government workers are covered by the program. Institutionalized persons, such as prison inmates, are excluded. To be included in the fatality census, the decedent must have been employed (that is working for pay, compensation, or profit) at the time of the event, engaged in a legal work activity, or present at the site of the incident as a requirement of his or her job.

Definition

A fatal work injury is any intentional or unintentional wound or damage to the body resulting in death from acute exposure to energy, such as heat or electricity or kinetic energy from a crash, or from the absence of such essentials as heat or oxygen caused by a specific event or incident or series of events within a single workday or shift. Fatalities that occur during a person's commute to or from work are excluded from the census, as well as work-related illnesses, which can be difficult to identify due to long latency periods.

Notes on the data

Twenty-eight data elements are collected, coded, and tabulated in the fatality program, including information about the fatally injured worker, the fatal incident, and the machinery or equipment involved. Summary worker demographic data and event characteristics are included in a national news release that is available about 8 months after the end of the reference year. The Census of Fatal Occupational Injuries was initiated in 1992 as a joint Federal-State effort. Most States issue summary information at the time of the national news release.

For more information on the Census of Fatal Occupational Injuries contact the BLS Office of Safety, Health, and Working Conditions at (202) 606–6175, or access the BLS Internet site at: http://www.bls.gov/oshhome.htm

1. Labor market indicators

Selected indicators	1995	1996	1995				1996			
			I	II	III	IV	I	II	III	IV
Employment data										
Employment status of the civilian noninstitutionalized population (household survey):[1]										
Labor force participation rate	66.6	66.8	66.8	66.7	66.6	66.4	66.6	66.7	66.8	66.9
Employment-population ratio	62.9	63.2	63.1	62.9	62.8	62.8	62.9	63.1	63.3	63.4
Unemployment rate	5.6	5.4	5.5	5.7	5.6	5.5	5.6	5.4	5.3	5.3
Men	5.6	5.4	5.5	5.6	5.6	5.6	5.6	5.5	5.2	5.2
16 to 24 years	12.5	12.6	12.0	12.2	12.8	12.9	13.0	12.7	12.4	12.3
25 years and over	4.3	4.1	4.2	4.4	4.3	4.2	4.3	4.1	3.9	3.9
Women	5.6	5.4	5.6	5.7	5.7	5.5	5.5	5.4	5.3	5.4
16 to 24 years	11.6	11.3	11.3	11.5	12.1	11.6	11.9	11.1	11.1	11.2
25 years and over	4.4	4.3	4.4	4.5	4.4	4.3	4.3	4.3	4.2	4.3
Employment, nonfarm (payroll data), in thousands:[1]										
Total	117,203	119,557	116,484	116,956	117,441	117,928	118,466	119,264	119,958	120,519
Private sector	97,892	100,096	97,222	97,663	98,103	98,587	99,101	99,830	100,422	101,006
Goods-producing	24,206	24,259	24,277	24,235	24,175	24,148	24,187	24,249	24,273	21,321
Manufacturing	18,468	18,283	18,554	18,522	18,434	18,366	18,307	18,295	18,266	18,264
Service-producing	92,997	95,298	92,207	92,721	93,266	93,780	94,279	95,015	95,685	96,198
Average hours:										
Private sector	34.5	34.4	34.6	34.4	34.4	34.4	34.3	34.4	34.4	34.6
Manufacturing	41.6	41.6	42.0	41.5	41.4	41.4	40.9	41.7	41.7	41.8
Overtime	4.4	4.5	4.7	4.3	4.3	4.3	4.2	4.6	4.5	4.5
Employment Cost Index										
Percent change in the ECI, compensation:										
All workers (excluding farm, household and Federal workers)	2.7	–	.8	.6	.8	.5	.9	.7	.8	.5
Private industry workers	2.6	–	.8	.7	.6	.4	.9	.9	.6	.6
Goods-producing[2]	2.4	–	.8	.5	.5	.6	.7	.9	.6	.6
Service-producing[2]	2.8	–	.9	.8	.7	.3	1.1	.8	.7	.5
State and local government workers	2.9	–	.6	.4	1.4	.5	.5	.2	1.3	.6
Workers by bargaining status (private industry):										
Union	2.8	–	.7	.6	.8	.7	.6	.9	.3	.5
Nonunion	2.7	–	.9	.7	.6	.4	.9	.8	.8	.5

[1] Quarterly data seasonally adjusted.

[2] Goods-producing industries include mining, construction, and manufacturing. Service-producing industries include all other private sector industries.

– Data not available.

2. Annual and quarterly percent changes in compensation, prices, and productivity

Selected measures	1994	1995	1995				1996			
			I	II	III	IV	I	II	III	IV
Compensation data[1,2]										
Employment Cost Index—compensation (wages, salaries, benefits):										
Civilian nonfarm	3.0	2.7	0.8	0.6	0.8	0.5	0.9	0.7	0.8	0.5
Private nonfarm	3.1	2.6	.8	.7	.6	.4	.9	.9	.6	.6
Employment Cost Index—wages and salaries:										
Civilian nonfarm	2.8	2.9	.7	.7	.8	.6	1.0	.8	.9	.6
Private nonfarm	2.8	2.8	.8	.7	.7	.6	1.1	1.0	.7	.6
Price data[1]										
Consumer Price Index (All Urban Consumers): All items	2.7	2.5	1.1	.7	.5	.2	1.4	.6	.7	.5
Producer Price Index:										
Finished goods	1.7	2.3	.7	.9	-.2	.9	.8	1.2	.1	.7
Finished consumer goods	1.6	2.3	.6	1.0	-.1	.6	1.0	1.6	.3	.6
Capital equipment	2.0	2.2	.8	.1	-.5	1.8	.1	-.1	-.7	1.1
Intermediate materials, supplies, and components	4.4	3.3	2.4	1.5	.1	-.6	-.2	1.0	.4	-.4
Crude materials	-.5	5.5	1.8	1.1	-.9	3.4	3.8	3.0	-.4	5.3
Productivity data[3]										
Output per hour of all persons:										
Business sector	.5	.1	-2.6	1.4	1.4	-.6	2.1	1.2	.3	2.4
Nonfarm business sector	.5	.3	-2.3	1.5	1.8	-1.2	1.9	.6	.0	2.2
Nonfinancial corporations[4]	1.3	.4	-3.4	2.3	4.9	2.4	1.3	1.5	4.1	–

[1] Annual changes are December-to-December changes. Quarterly changes are calculated using the last month of each quarter. Compensation and price data are not seasonally adjusted, and the price data are not compounded.

[2] Excludes Federal and private household workers.

[3] Annual rates of change are computed by comparing annual averages. Quarterly percent changes reflect annual rates of change in quarterly indexes. The data are seasonally adjusted.

[4] Output per hour of all employees.

3. Alternative measures of wage and compensation changes

Components	Quarterly average						Four quarters ending—					
	1995		1996				1995		1996			
	III	IV	I	II	III	IV	III	IV	I	II	III	IV
Average hourly compensation:[1]												
All persons, business sector	3.6	4.3	3.2	4.3	3.8	3.7	3.4	3.7	3.8	3.8	3.9	3.7
All persons, nonfarm business sector	3.7	4.0	3.4	3.9	3.3	3.6	3.5	3.7	3.8	3.8	3.7	3.6
Employment Cost Index—compensation:												
Civilian nonfarm[2]	.8	.5	.9	.7	.8	.5	2.7	2.7	2.8	2.9	2.8	2.9
Private nonfarm	.6	.4	.9	.9	.6	.6	2.6	2.6	2.7	2.9	2.9	3.1
Union	.8	.7	.6	.9	.3	.5	2.4	2.8	2.7	3.1	2.6	2.4
Nonunion	.6	.4	.9	.8	.8	.5	2.7	2.7	2.7	2.8	2.9	3.1
State and local governments	1.4	.5	.5	.2	1.3	.6	3.0	2.9	2.8	2.6	2.5	2.6
Employment Cost Index—wages and salaries:												
Civilian nonfarm[2]	.8	.6	1.0	.8	.9	.6	2.8	2.9	3.1	3.2	3.2	3.3
Private nonfarm	.7	.6	1.1	1.0	.7	.6	2.8	2.8	3.2	3.4	3.3	3.4
Union	.7	.6	.5	1.1	.5	.5	2.4	2.6	2.5	3.0	2.7	2.6
Nonunion	.7	.6	1.2	.9	.8	.6	2.9	2.9	3.3	3.4	3.5	3.6
State and local governments	1.6	.6	.4	.2	1.6	.6	3.1	3.2	2.8	2.8	2.8	2.8

[1] Seasonally adjusted. "Quarterly average" is percent change from a quarter ago, at an annual rate.

[2] Excludes Federal and household workers.

4. Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted

[Numbers in thousands]

Employment status	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
TOTAL															
Civilian noninstitutional population[1]	198,584	200,591	199,634	199,773	199,921	200,101	200,278	200,459	200,641	200,847	201,061	201,273	201,463	201,636	202,285
Civilian labor force	132,304	133,943	132,899	133,070	133,464	133,427	133,759	133,709	134,165	133,898	134,291	134,636	134,831	135,022	135,848
Participation rate	66.6	66.8	66.6	66.6	66.8	66.7	66.8	66.7	66.9	66.7	66.8	66.9	66.9	67.0	67.2
Employed	124,900	126,708	125,311	125,706	126,062	126,125	126,428	126,590	126,889	126,988	127,248	127,617	127,644	127,855	128,580
Employment-population ratio[2]	62.9	63.2	62.8	62.9	63.1	63.0	63.1	63.2	63.2	63.2	63.3	63.4	63.4	63.4	63.6
Unemployed	7,404	7,236	7,588	7,364	7,402	7,302	7,331	7,119	7,276	6,910	7,043	7,019	7,187	7,167	7,268
Unemployment rate	5.6	5.4	5.7	5.5	5.5	5.5	5.5	5.3	5.4	5.2	5.2	5.2	5.3	5.3	5.4
Not in the labor force	66,280	66,647	66,730	66,754	66,266	66,741	66,368	66,790	66,460	66,949	66,770	66,637	66,632	66,614	66,437
Men, 20 years and over															
Civilian noninstitutional population[1]	87,811	88,606	88,223	88,926	88,366	88,440	88,530	88,570	88,614	88,650	88,733	88,840	88,971	89,040	89,446
Civilian labor force	67,324	68,044	67,556	67,688	67,886	67,829	67,996	68,088	68,222	68,044	68,056	68,273	68,391	68,369	68,998
Participation rate	76.7	76.8	76.6	76.7	76.8	76.7	76.8	76.9	77.0	76.8	76.7	76.8	76.9	76.8	77.1
Employed	64,085	64,897	64,258	64,416	64,562	64,573	64,788	64,933	65,071	65,165	64,978	65,299	65,349	65,367	65,813
Employment-population ratio[2]	73.0	73.2	72.8	73.0	73.1	73.0	73.2	73.3	73.4	73.5	73.2	73.5	73.4	73.4	73.6
Agriculture	2,335	2,356	2,382	2,371	2,376	2,310	2,342	2,318	2,366	2,347	2,366	2,400	2,355	2,356	2,364
Nonagricultural industries	61,750	62,541	61,876	62,045	62,186	62,263	62,446	62,615	62,705	62,818	62,612	62,899	62,994	63,011	63,449
Unemployed	3,239	3,146	3,298	3,272	3,324	3,256	3,208	3,155	3,151	2,879	3,078	2,974	3,042	3,002	3,185
Unemployment rate	4.8	4.6	4.9	4.8	4.9	4.8	4.7	4.6	4.6	4.2	4.5	4.4	4.4	4.4	4.6
Women, 20 years and over															
Civilian noninstitutional population[1]	96,262	97,050	96,717	96,757	96,798	96,857	96,925	96,999	97,064	97,146	97,226	97,290	97,366	97,457	97,520
Civilian labor force	57,215	58,094	57,594	57,618	57,803	57,817	57,885	57,909	58,139	58,230	58,349	58,432	58,574	58,728	58,894
Participation rate	59.4	59.9	59.5	59.5	59.7	59.7	59.7	59.7	59.9	59.9	60.0	60.1	60.2	60.3	60.4
Employed	54,396	55,311	54,684	54,845	55,054	55,075	55,067	55,196	55,315	55,498	55,644	55,681	55,753	55,871	56,165
Employment-population ratio[2]	56.5	57.0	56.5	56.7	56.9	56.9	56.8	56.9	57.0	57.1	57.2	57.2	57.3	57.3	57.6
Agriculture	830	827	849	845	842	842	831	835	847	826	844	800	786	772	797
Nonagricultural industries	53,566	54,484	53,835	54,000	54,212	54,233	54,236	54,361	54,468	54,672	54,800	54,881	54,967	55,099	55,369
Unemployed	2,819	2,783	2,910	2,773	2,749	2,742	2,818	2,713	2,824	2,732	2,705	2,751	2,821	2,857	2,729
Unemployment rate	4.9	4.8	5.1	4.8	4.8	4.7	4.9	4.7	4.9	4.7	4.6	4.7	4.8	4.9	4.6
Both sexes, 16 to 19 years															
Civilian noninstitutional population[1]	14,511	14,934	14,694	14,719	14,757	14,805	14,823	14,890	14,963	15,051	15,101	15,143	15,126	15,139	15,318
Civilian labor force	7,765	7,806	7,749	7,764	7,775	7,781	7,878	7,712	7,804	7,624	7,886	7,931	7,866	7,925	7,956
Participation rate	53.5	52.3	52.7	52.7	52.7	52.6	53.1	51.8	52.2	50.7	52.2	52.4	52.0	52.3	51.9
Employed	6,419	6,500	6,369	6,445	6,446	6,477	6,573	6,461	6,503	6,325	6,626	6,637	6,542	6,617	6,601
Employment-population ratio[2]	44.2	43.5	43.3	43.8	43.7	43.7	44.3	43.4	43.5	42.0	43.9	43.8	43.3	43.7	43.1
Agriculture	275	261	267	283	252	260	301	255	257	245	270	250	213	298	307
Nonagricultural industries	6,144	6,239	6,102	6,162	6,194	6,217	6,272	6,206	6,246	6,080	6,356	6,387	6,329	6,319	6,294
Unemployed	1,346	1,306	1,380	1,319	1,329	1,304	1,305	1,251	1,301	1,299	1,260	1,294	1,324	1,308	1,354
Unemployment rate	17.3	16.7	17.8	17.0	17.1	16.8	16.6	16.2	16.7	17.0	16.0	16.3	16.8	16.5	17.0
White															
Civilian noninstitutional population[1]	166,914	168,317	167,669	167,757	167,853	167,973	168,098	168,222	168,345	168,489	168,639	168,788	168,924	169,044	169,436
Civilian labor force	111,950	113,108	112,207	112,651	112,827	112,720	113,025	112,940	113,139	112,904	113,334	113,625	113,816	113,991	114,377
Participation rate	67.1	67.2	66.9	67.2	67.2	67.1	67.2	67.1	67.2	67.0	67.2	67.3	67.4	67.4	67.5
Employed	106,490	107,808	106,631	107,192	107,398	107,364	107,576	107,733	107,862	107,853	108,217	108,527	108,570	108,734	109,151
Employment-population ratio[2]	63.8	64.1	63.6	63.9	64.0	63.9	64.0	34.0	34.1	64.0	64.2	64.3	64.3	64.3	64.4
Unemployed	5,459	5,300	5,576	5,459	5,429	5,356	5,449	5,207	5,277	5,051	5,117	5,098	5,246	5,257	5,226
Unemployment rate	4.9	4.7	5.0	4.8	4.8	4.8	4.8	4.6	4.7	4.5	4.5	4.5	4.6	4.6	4.6
Black															
Civilian noninstitutional population[1]	23,246	23,604	23,424	23,455	23,485	23,519	23,549	23,579	23,611	23,650	23,690	23,728	23,762	23,794	23,847
Civilian labor force	14,817	15,134	14,982	14,862	15,019	15,004	15,138	15,010	15,212	15,297	15,184	15,276	15,290	15,306	15,372
Participation rate	63.7	64.1	64.0	63.4	64.0	63.8	64.3	63.7	64.4	64.7	64.1	64.4	64.3	64.3	64.5
Employed	13,279	13,542	13,388	13,326	13,401	13,432	13,584	13,478	13,612	13,699	13,566	13,647	13,673	13,693	13,709
Employment-population ratio[2]	57.1	57.4	57.2	56.8	57.1	57.1	57.7	57.2	57.7	57.9	57.3	57.5	57.5	57.5	57.5
Unemployed	1,538	1,592	1,594	1,536	1,618	1,572	1,554	1,532	1,600	1,598	1,618	1,629	1,617	1,613	1,663
Unemployment rate	10.4	10.5	10.6	10.3	10.8	10.5	10.3	10.2	10.5	10.4	10.7	10.7	10.6	10.5	10.8

See footnotes at end of table.

Continued—Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted

[Numbers in thousands]

Employment status	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Hispanic origin															
Civilian noninstitutional population[1]	18,629	19,213	18,929	18,977	19,025	19,080	19,131	19,184	19,238	19,292	19,346	19,398	19,454	19,505	20,013
Civilian labor force	12,267	12,774	12,556	12,589	12,543	12,552	12,602	12,624	12,697	12,864	12,871	12,989	13,182	13,150	13,795
Participation rate	65.8	66.5	66.3	66.3	65.9	65.8	65.9	65.8	66.0	66.7	66.5	67.0	67.8	67.4	68.9
Employed	11,127	11,642	11,375	11,388	11,320	11,357	11,438	11,510	11,567	11,736	11,801	11,928	12,094	12,141	12,653
Employment-population ratio[2]	59.7	60.6	60.1	60.0	59.5	59.5	59.8	60.0	60.1	60.8	61.0	61.5	62.2	62.2	63.2
Unemployed	1,140	1,132	1,181	1,201	1,223	1,195	1,164	1,114	1,130	1,128	1,070	1,061	1,088	1,009	1,142
Unemployment rate	9.3	8.9	9.4	9.5	9.8	9.5	9.2	8.8	8.9	8.8	8.3	8.2	8.3	7.7	8.3

[1] The population figures are not seasonally adjusted.

[2] Civilian employment as a percent of the civilian noninstitutional population.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" groups are not presented and Hispanics are included in both the white and black population groups.

Selected employment indicators, monthly data seasonally adjusted

[In thousands]

Selected categories	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov,	Dec.	Jan.
Characteristic															
Employed, 16 years and over	124,900	126,708	125,311	125,706	126,062	126,125	126,428	126,590	126,889	126,988	127,248	127,617	127,644	127,855	128,580
Men	67,377	68,207	67,527	67,742	67,856	67,932	68,188	68,251	68,376	68,368	68,304	68,647	68,589	68,707	69,164
Women	57,523	58,501	57,784	57,964	58,206	58,193	58,240	58,339	58,513	58,620	58,944	58,970	59,055	59,148	59,416
Married men, spouse present	42,048	42,417	42,178	42,297	42,223	42,127	42,395	42,520	42,503	42,588	42,330	42,617	42,631	42,607	42,909
Married women, spouse present	32,063	32,406	32,117	32,153	32,168	31,983	32,339	32,456	32,634	32,665	32,679	32,537	32,509	32,631	32,826
Women who maintain families	7,164	7,363	7,281	7,299	7,372	7,366	7,323	7,364	7,253	7,338	7,420	7,392	7,444	7,500	7,501
Class of worker															
Agriculture:															
Wage and salary workers	1,814	1,869	1,944	1,933	1,863	1,852	1,957	1,883	1,860	1,814	1,834	1,813	1,829	1,878	1,988
Self-employed workers	1,580	1,518	1,540	1,529	1,560	1,502	1,472	1,490	1,546	1,525	1,557	1,560	1,464	1,475	1,448
Unpaid family workers	45	56	46	37	43	51	48	36	53	64	91	71	68	66	62
Nonagricultural industries:															
Wage and salary workers	112,448	114,171	112,801	113,188	113,535	113,577	113,940	114,000	114,278	114,539	114,765	115,018	115,133	115,212	115,560
Government	18,362	18,217	18,114	18,233	18,141	18,307	18,240	18,280	18,280	18,265	18,092	18,132	18,270	18,266	18,385
Private industries	94,086	95,954	94,687	94,955	95,394	95,270	95,700	95,720	95,998	96,274	96,673	96,886	96,863	96,946	97,176
Private households	963	928	936	894	911	873	925	829	930	973	981	992	956	934	1,002
Other	93,123	95,025	93,751	94,061	94,483	94,397	94,775	94,891	95,068	95,301	95,692	95,894	95,907	96,012	96,174
Self-employed workers	8,902	8,971	8,927	8,948	9,041	9,045	8,882	9,027	8,984	8,896	8,811	8,967	9,023	9,109	9,445
Unpaid family workers	110	122	91	114	105	104	121	127	128	122	129	137	140	149	162
Persons at work part time[1]															
Industries:															
Part time for economic reasons	4,473	4,315	4,210	4,429	4,451	4,466	4,311	4,325	4,338	4,339	4,302	4,286	3,983	4,338	4,426
Slack work or business conditions	2,471	2,388	2,288	2,509	2,507	2,581	2,255	2,391	2,552	2,437	2,398	2,258	2,107	2,353	2,423
Could only find part-time work	1,702	1,605	1,544	1,608	1,608	1,577	1,704	1,584	1,549	1,596	1,617	1,683	1,559	1,653	1,552
Part time for noneconomic reasons	17,734	17,770	17,435	17,621	17,743	17,712	17,643	17,960	17,877	18,184	17,823	17,754	17,957	17,868	18,340
Agricultural industries:															
Part time for economic reasons	4,279	4,123	3,940	4,224	4,224	4,251	4,109	4,161	4,150	4,182	4,130	4,118	3,815	4,162	4,163
Slack work or business conditions	2,346	2,263	2,155	2,362	2,363	2,462	2,136	2,282	2,422	2,310	2,284	2,147	2,001	2,214	2,310
Could only find part-time work	1,663	1,576	1,509	1,588	1,573	1,543	1,655	1,558	1,517	1,588	1,580	1,647	1,543	1,622	1,512
Part time for noneconomic reasons	17,093	17,150	16,780	17,002	17,114	17,068	17,039	17,298	17,250	17,555	17,204	17,123	17,313	17,237	17,737

[1] Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial disputes.

6. Selected unemployment indicators, monthly data seasonally adjusted

[Unemployment rates]

Selected categories	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Characteristic															
Total, all workers	5.6	5.4	5.7	5.5	5.5	5.5	5.5	5.3	5.4	5.2	5.2	5.2	5.3	5.3	5.4
Both sexes, 16 to 19 years	17.3	16.7	17.8	17.0	17.1	16.8	16.6	16.2	16.7	17.0	16.0	16.3	16.8	16.5	17.0
Men, 20 years and over	4.8	4.6	4.9	4.8	4.9	4.8	4.7	4.6	4.6	4.2	4.5	4.4	4.4	4.4	4.6
Women, 20 years and over	4.9	4.8	5.1	4.8	4.8	4.7	4.9	4.7	4.9	4.7	4.6	4.7	4.8	4.9	4.6
White, total	4.9	4.7	5.0	4.8	4.8	4.8	4.8	4.6	4.7	4.5	4.5	4.5	4.6	4.6	4.6
Both sexes, 16 to 19 years	14.5	14.2	15.5	14.5	14.7	14.3	14.2	13.9	14.4	14.3	13.4	13.6	14.1	13.7	14.3
Men, 16 to 19 years	15.6	15.5	16.3	15.4	15.9	15.3	15.3	14.9	16.1	15.7	14.8	15.4	15.5	14.8	14.9
Women, 16 to 19 years	13.4	12.9	14.6	13.6	13.3	13.1	13.0	12.8	12.4	12.9	11.9	11.6	12.6	12.6	13.6
Men, 20 years and over	4.3	4.1	4.3	4.2	4.3	4.2	4.1	4.1	4.0	3.8	3.9	3.8	3.9	3.9	4.0
Women, 20 years and over	4.3	4.1	4.4	4.3	4.1	4.2	4.4	4.0	4.1	4.0	4.0	4.0	4.2	4.3	3.9
Black, total	10.4	10.5	10.6	10.3	10.8	10.5	10.3	10.2	10.5	10.4	10.7	10.7	10.6	10.5	10.8
Both sexes, 16 to 19 years	35.7	33.6	34.2	32.9	32.7	32.9	29.7	31.6	33.5	37.0	34.0	34.2	35.4	34.7	34.8
Men, 16 to 19 years	37.1	36.9	38.1	32.5	36.3	34.9	30.0	36.6	43.0	38.2	37.2	36.5	41.2	38.6	42.7
Women, 16 to 19 years	34.3	30.3	30.6	33.3	29.1	30.8	29.3	26.9	22.4	35.8	30.9	31.9	30.0	31.2	27.5
Men, 20 years and over	8.8	9.4	9.4	9.9	10.3	9.6	9.6	9.2	9.3	8.3	9.7	9.3	9.2	8.8	9.2
Women, 20 years and over	8.6	8.7	8.9	8.0	8.4	8.4	8.4	8.6	8.9	9.0	8.7	8.9	8.9	9.2	9.2
Hispanic origin, total	9.3	8.9	9.4	9.5	9.8	9.5	9.2	8.8	8.9	8.8	8.3	8.2	8.3	7.7	8.3
Married men, spouse present	3.3	3.0	3.2	3.1	3.1	3.0	3.0	3.0	3.0	2.9	3.0	3.0	3.0	3.0	2.8
Married women, spouse present	3.9	3.6	3.9	3.8	3.5	3.7	3.7	3.6	3.5	3.4	3.4	3.5	3.6	3.7	3.3
Women who maintain families	8.0	8.2	8.2	7.6	7.7	7.3	8.5	7.8	8.8	8.5	8.3	8.5	8.8	8.4	9.1
Full-time workers	5.5	5.3	5.6	5.4	5.5	5.4	5.4	5.2	5.3	5.0	5.1	5.1	5.3	5.2	5.2
Part-time workers	6.0	5.8	6.0	6.0	6.0	5.9	5.9	5.6	6.0	5.9	5.6	5.6	5.6	5.8	5.7
Industry															
Nonagricultural wage and salary workers	5.8	5.5	5.8	5.6	5.7	5.6	5.7	5.5	5.5	5.4	5.3	5.3	5.5	5.4	5.4
Mining	5.2	5.1	5.2	6.3	6.5	4.6	2.2	4.9	3.0	4.5	5.1	5.8	4.9	7.6	6.0
Construction	11.5	10.1	10.9	10.8	10.3	10.3	10.2	9.6	9.8	9.1	9.3	9.6	10.3	9.4	10.1
Manufacturing	4.9	4.8	5.0	4.8	5.2	4.8	5.0	4.9	4.7	4.7	4.4	4.7	4.7	4.8	4.6
Durable goods	4.4	4.5	4.5	4.9	4.9	4.7	4.7	4.5	4.3	4.0	4.2	4.4	4.5	4.7	4.4
Nondurable goods	5.7	5.2	5.7	4.6	5.6	5.0	5.5	5.5	5.3	5.8	4.7	5.1	5.1	5.0	4.8
Transportation and public utilities	4.5	4.1	3.9	4.0	4.2	4.2	4.2	4.4	4.3	4.1	4.1	4.4	3.5	4.0	4.1
Wholesale and retail trade	6.5	6.4	6.7	6.4	6.7	6.5	6.5	6.4	6.3	6.3	6.2	6.2	6.3	6.2	6.4
Finance, insurance, and real estate	3.3	2.7	2.8	2.3	2.5	2.4	2.6	2.6	2.8	2.5	3.0	2.9	2.9	3.1	3.5
Services	5.4	5.4	5.6	5.6	5.5	5.6	5.7	5.1	5.5	5.2	5.3	5.0	5.3	5.2	4.9
Government workers	2.9	2.9	2.8	2.9	2.8	2.9	3.2	2.8	3.1	2.8	3.0	2.9	2.8	3.0	2.9
Agricultural wage and salary workers	11.1	10.2	10.7	10.6	10.7	11.0	10.3	9.6	9.1	7.6	10.8	10.0	10.9	10.3	8.6

7. Duration of unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Weeks of unemployment	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Less than 5 weeks	2,700	2,633	2,774	2,736	2,632	2,450	2,754	2,544	2,603	2,534	2,522	2,556	2,819	2,671	2,801
5 to 14 weeks	2,342	2,287	2,370	2,291	2,305	2,330	2,310	2,201	2,307	2,199	2,245	2,265	2,252	2,357	2,223
15 weeks and over	2,363	2,316	2,369	2,322	2,406	2,387	2,354	2,353	2,326	2,273	2,277	2,294	2,184	2,179	2,155
15 to 26 weeks	1,085	1,053	1,114	1,097	1,102	1,098	1,048	1,051	994	1,003	1,040	1,062	1,018	976	943
27 weeks and over	1,278	1,262	1,255	1,225	1,304	1,289	1,306	1,302	1,332	1,270	1,237	1,232	1,166	1,203	1,212
Mean duration, in weeks	16.6	16.7	16.2	16.6	17.2	17.3	16.9	17.2	16.9	17.2	16.9	16.7	16.0	15.8	16.0
Median duration, in weeks	8.3	8.3	8.2	8.1	8.2	8.6	8.4	8.1	8.5	8.5	8.6	8.3	7.7	7.8	7.7

8. Unemployed persons by reason for unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Reason for unemployment	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Job losers[1]	3,476	3,370	3,586	3,543	3,508	3,535	3,409	3,399	3,348	3,095	3,236	3,171	3,261	3,221	3,245
On temporary layoff	1,030	1,021	1,106	1,041	1,031	1,092	1,070	1,000	980	931	989	957	994	987	953
Not on temporary layoff	2,446	2,349	2,480	2,502	2,477	2,443	2,339	2,399	2,368	2,164	2,247	2,214	2,267	2,234	2,293
Job leavers	824	774	835	749	783	723	688	702	754	775	800	797	825	845	890
Reentrants	2,525	2,512	2,481	2,499	2,538	2,487	2,709	2,437	2,522	2,467	2,441	2,489	2,523	2,556	2,505
New entrants	579	580	620	603	593	567	546	545	590	552	559	577	586	626	600
Percent of unemployed															
Job losers[1]	46.9	46.6	47.7	47.9	47.3	48.3	46.4	48.0	46.4	44.9	46.0	45.1	45.3	44.4	44.8
On temporary layoff	13.9	14.1	14.7	14.1	13.9	14.9	14.6	14.1	13.6	13.5	14.1	13.6	13.8	13.6	13.2
Not on temporary layoff	33.0	32.5	33.0	33.8	33.4	33.4	31.8	33.9	32.8	31.4	31.9	31.5	31.5	30.8	31.7
Job leavers	11.1	10.7	11.1	10.1	10.5	9.9	9.4	9.9	10.5	11.2	11.4	11.3	11.5	11.7	12.3
Reentrants	34.1	34.7	33.0	33.8	34.2	34.0	36.8	34.4	35.0	35.8	34.7	35.4	35.1	35.3	34.6
New entrants	7.8	8.0	8.2	8.2	8.0	7.8	7.4	7.7	8.2	8.0	7.9	8.2	8.1	8.6	8.3
Percent of civilian labor force															
Job losers[1]	2.6	2.5	2.7	2.7	2.6	2.6	2.5	2.5	2.5	2.3	2.4	2.4	2.4	2.4	2.4
Job leavers	.6	.6	.6	.6	.6	.5	.5	.5	.6	.6	.6	.6	.6	.6	.7
Reentrants	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.8	1.9	1.8	1.8	1.8	1.9	1.9	1.8
New entrants	.4	.4	.5	.5	.4	.4	.4	.4	.4	.4	.4	.4	.4	.5	.4

[1] Includes persons who completed temporary jobs.

9. Unemployment rates by sex and age, monthly data seasonally adjusted

[Civilian workers]

Sex and age	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Total, 16 years and over	5.6	5.4	5.7	5.5	5.5	5.5	5.5	5.3	5.4	5.2	5.2	5.2	5.3	5.3	5.4
16 to 24 years	12.1	12.0	12.8	12.3	12.3	11.9	12.1	11.8	12.1	11.7	11.5	11.7	11.9	11.9	12.2
16 to 19 years	17.3	16.7	17.8	17.0	17.1	16.8	16.6	16.2	16.7	17.0	16.0	16.3	16.8	16.5	17.0
16 to 17 years	20.2	18.9	20.1	19.9	19.4	19.0	19.5	18.5	19.5	18.9	17.6	18.0	17.0	19.3	17.7
18 to 19 years	15.3	15.2	16.2	14.3	15.6	15.3	14.4	14.1	14.6	15.7	14.7	15.3	17.0	14.7	16.6
20 to 24 years	9.1	9.3	9.9	9.6	9.5	9.1	9.5	9.2	9.5	8.6	8.9	8.9	9.0	9.1	9.4
25 years and over	4.3	4.2	4.3	4.3	4.3	4.2	4.3	4.1	4.1	4.0	4.1	4.0	4.1	4.1	4.0
25 to 54 years	4.5	4.3	4.5	4.4	4.3	4.4	4.4	4.2	4.3	4.1	4.2	4.2	4.2	4.2	4.2
55 years and over	3.7	3.4	3.6	3.6	3.7	3.3	3.5	3.5	3.7	3.2	3.3	3.2	3.1	3.3	3.1
Men, 16 years and over	5.6	5.4	5.7	5.6	5.7	5.5	5.5	5.4	5.4	5.0	5.2	5.1	5.2	5.1	5.4
16 to 24 years	12.5	12.6	12.9	13.1	13.1	12.8	12.8	12.5	13.1	12.0	12.1	12.3	12.5	12.3	12.9
16 to 19 years	18.4	18.1	18.9	18.0	18.7	17.9	17.6	17.5	19.3	18.2	17.5	18.1	18.4	17.4	18.4
16 to 17 years	21.1	20.8	21.7	21.6	21.2	21.2	20.5	20.5	23.4	21.5	19.2	19.6	18.9	20.6	20.4
18 to 19 years	16.5	16.3	16.8	14.3	17.1	16.2	15.5	15.0	16.1	16.1	16.2	17.1	19.0	15.4	17.1
20 to 24 years	9.2	9.5	9.5	10.3	9.9	9.8	10.1	9.6	9.6	8.4	9.0	8.9	9.2	9.3	9.8
25 years and over	4.3	4.1	4.3	4.2	4.3	4.2	4.1	4.0	4.0	3.8	4.0	3.8	3.9	3.8	4.0
25 to 54 years	4.4	4.2	4.4	4.4	4.4	4.4	4.2	4.1	4.1	3.9	4.2	4.0	4.0	3.9	4.1
55 years and over	3.7	3.3	3.5	3.5	3.5	3.1	3.3	3.5	3.7	3.2	3.3	3.0	3.1	3.4	3.2
Women, 16 years and over	5.6	5.4	5.8	5.5	5.4	5.4	5.5	5.3	5.4	5.4	5.2	5.3	5.5	5.5	5.3
16 to 24 years	11.6	11.3	12.7	11.5	11.4	11.0	11.3	11.0	11.0	11.5	10.9	11.0	11.3	11.4	11.4
16 to 19 years	16.1	15.2	16.6	15.9	15.4	15.5	15.5	14.8	13.8	15.8	14.4	14.4	15.2	15.5	15.5
16 to 17 years	19.2	16.9	18.4	18.0	17.4	16.7	18.4	17.3	15.2	16.3	16.0	16.2	15.1	18.1	14.9
18 to 19 years	14.0	14.0	15.4	14.4	14.0	14.3	13.2	13.0	12.8	15.2	13.1	13.4	15.0	14.0	16.2
20 to 24 years	9.0	9.0	10.4	8.9	9.1	8.4	8.9	8.8	9.3	8.9	8.7	8.9	8.9	8.9	8.9
25 years and over	4.4	4.3	4.4	4.3	4.3	4.3	4.4	4.2	4.3	4.2	4.2	4.2	4.3	4.5	4.1
25 to 54 years	4.5	4.4	4.5	4.4	4.3	4.3	4.5	4.3	4.5	4.3	4.2	4.4	4.5	4.7	4.3
55 years and over	3.6	3.5	3.7	3.7	3.9	3.6	3.8	3.5	3.6	3.0	3.4	3.4	3.0	3.3	2.9

10. Unemployment rates by State, seasonally adjusted

State	Dec. 1995	Nov. 1996	Dec. 1996[p]	State	Dec. 1995	Nov. 1996	Dec. 1996[p]
Alabama	6.3	5.0	4.0	Missouri	4.2	4.5	4.5
Alaska	7.8	7.5	7.5	Montana	6.1	4.6	4.6
Arizona	4.6	5.3	5.0	Nebraska	2.7	2.7	2.4
Arkansas	4.8	5.2	4.9	Nevada	5.1	5.0	5.2
California	7.8	7.0	6.8	New Hampshire	3.5	3.9	3.3
Colorado	4.1	3.8	3.7	New Jersey	6.5	6.2	6.2
Connecticut	5.6	5.1	5.2	New Mexico	6.5	7.0	7.0
Delaware	4.8	5.5	5.0	New York	6.3	6.0	6.1
District of Columbia	8.9	7.3	8.2	North Carolina	4.6	4.1	4.2
Florida	5.4	5.1	4.8	North Dakota	3.1	2.7	2.8
Georgia	4.8	4.6	4.6	Ohio	5.0	5.0	5.0
Hawaii	5.9	6.0	6.0	Oklahoma	4.3	4.3	4.1
Idaho	5.4	5.0	5.4	Oregon	4.9	5.5	5.6
Illinois	5.3	5.0	5.1	Pennsylvania	6.0	4.8	4.9
Indiana	4.6	3.6	3.4	Rhode Island	6.9	4.9	5.2
Iowa	3.4	3.4	3.5	South Carolina	5.3	6.2	5.6
Kansas	4.1	4.0	4.1	South Dakota	2.9	2.9	3.0
Kentucky	5.4	5.0	5.5	Tennessee	5.6	5.1	5.0
Louisiana	6.5	6.1	6.3	Texas	6.1	5.6	5.3
Maine	5.3	4.2	4.4	Utah	3.1	3.0	3.1
Maryland	5.1	4.4	4.4	Vermont	4.2	4.5	4.4
Massachusetts	5.2	4.0	4.1	Virginia	4.4	4.0	4.1
Michigan	5.1	4.7	4.7	Washington	6.3	5.8	6.0
Minnesota	3.8	3.8	3.5	West Virginia	7.7	7.2	7.4
Mississippi	6.1	5.5	5.4	Wisconsin	3.7	3.1	3.5
				Wyoming	4.4	4.6	4.4

[p] = preliminary

11. Employment of workers on nonfarm payrolls by State, seasonally adjusted

[In thousands]

State	Dec. 1995	Nov. 1996	Dec. 1996[p]	State	Dec. 1995	Nov. 1996	Dec. 1996[p]
Alabama	1,815.0	1,830.3	1,832.8	Missouri	2,545.8	2,577.4	2,584.7
Alaska	263.7	264.3	263.4	Montana	353.3	360.9	358.2
Arizona	1,813.2	1,889.1	1,885.2	Nebraska	819.8	836.9	839.0
Arkansas	1,080.8	1,095.8	1,099.3	Nevada	817.3	870.2	872.9
California	12,570.6	12,884.9	12,892.8	New Hampshire	546.1	551.4	550.9
Colorado	1,879.6	1,902.4	1,905.6	New Jersey	3,622.3	3,655.7	3,660.6
Connecticut	1,562.7	1,583.7	1,586.8	New Mexico	703.6	718.6	721.9
Delaware	371.0	376.6	378.2	New York	7,903.9	7,956.4	7,960.4
District of Columbia	637.7	627.5	627.0	North Carolina	3,483.3	3,546.9	3,552.1
Florida	6,100.8	6,259.0	6,289.4	North Dakota	305.3	312.1	313.0
Georgia	3,483.2	3,571.8	3,579.6	Ohio	5,287.5	5,321.0	5,334.4
Hawaii	529.5	521.9	522.7	Oklahoma	1,336.8	1,368.3	1,371.2
Idaho	484.8	505.6	505.2	Oregon	1,444.7	1,502.7	1,506.8
Illinois	5,643.8	5,727.6	5,727.6	Pennsylvania	5,253.1	5,285.0	5,292.6
Indiana	2,797.9	2,812.0	2,805.7	Rhode Island	443.9	446.7	447.4
Iowa	1,373.8	1,391.7	1,399.9	South Carolina	1,659.4	1,699.8	1,690.4
Kansas	1,218.9	1,251.5	1,244.1	South Dakota	349.6	355.9	354.6
Kentucky	1,658.6	1,681.7	1,685.3	Tennessee	2,546.6	2,587.2	2,594.5
Louisiana	1,795.4	1,806.2	1,811.2	Texas	8,171.7	8,356.5	8,371.4
Maine	545.4	545.2	546.2	Utah	931.4	972.6	977.8
Maryland	2,183.2	2,192.3	2,194.9	Vermont	272.6	276.0	277.0
Massachusetts	3,001.5	3,036.1	3,041.9	Virginia	3,085.6	3,141.4	3,152.0
Michigan	4,292.1	4,351.8	4,358.2	Washington	2,367.1	2,437.9	2,445.8
Minnesota	2,390.8	2,445.3	2,447.6	West Virginia	692.0	698.4	697.6
Mississippi	1,077.7	1,072.9	1,073.5	Wisconsin	2,568.5	2,612.8	2,616.2
				Wyoming	221.4	221.5	221.5

[p] = preliminary

NOTE: Some data in this table may differ from data published elsewhere because of the continual updating of the data base.

12. Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]	Jan.[p]
TOTAL	117,203	119,554	118,070	118,579	118,737	118,928	119,335	119,537	119,772	120,052	120,050	120,311	120,492	120,753	121,024
PRIVATE SECTOR	97,892	100,094	98,734	99,214	99,343	99,531	99,877	100,091	100,288	100,446	100,531	100,803	100,995	101,219	101,469
GOODS-PRODUCING	24,206	24,259	24,112	24,254	24,196	24,209	24,262	24,274	24,264	24,298	24,257	24,284	24,319	24,359	24,391
Mining[1]	580	570	569	573	574	573	576	575	570	570	567	566	566	564	564
Metal mining	51	52	51	51	51	51	52	52	52	52	52	52	52	52	52
Oil and gas extraction	318	311	310	313	314	314	316	314	310	311	309	308	308	307	307
Nonmetallic minerals, except fuels	106	108	107	107	108	107	107	108	108	108	108	108	109	109	109
Construction	5,158	5,407	5,234	5,349	5,340	5,353	5,384	5,401	5,427	5,437	5,449	5,464	5,491	5,519	5,533
General building contractors	1,200	1,230	1,205	1,218	1,223	1,227	1,229	1,232	1,231	1,232	1,233	1,233	1,241	1,249	1,260
Heavy construction, except building	751	764	741	764	769	765	764	768	769	770	765	765	764	768	767
Special trades contractors	3,207	3,412	3,288	3,367	3,348	3,361	3,391	3,401	3,427	3,435	3,451	3,466	3,486	3,502	3,506
Manufacturing	18,468	18,282	18,309	18,332	18,282	18,283	18,302	18,298	18,267	18,291	18,241	18,254	18,262	18,276	18,294
Production workers	12,787	12,626	12,656	12,671	12,619	12,624	12,631	12,634	12,614	12,626	12,591	12,606	12,613	12,618	12,635
Durable goods	10,654	10,676	10,643	10,659	10,623	10,654	10,679	10,696	10,680	10,711	10,675	10,684	10,694	10,711	10,727
Production workers	7,298	7,310	7,288	7,298	7,263	7,289	7,300	7,326	7,313	7,339	7,307	7,318	7,327	7,334	7,352
Lumber and wood products	764	764	750	756	755	761	762	767	764	769	766	769	771	771	769
Furniture and fixtures	509	501	503	502	500	498	500	500	500	499	500	499	501	502	501
Stone, clay, and glass products	538	536	532	536	536	534	537	536	535	536	537	538	537	539	535
Primary metal industries	710	705	709	708	706	704	705	708	700	706	706	702	703	702	702
Blast furnaces and basic steel products	241	238	240	240	239	238	239	239	237	237	237	234	234	233	235
Fabricated metal products	1,438	1,451	1,442	1,443	1,442	1,440	1,443	1,450	1,454	1,456	1,456	1,459	1,461	1,461	1,463
Industrial machinery and equipment	2,059	2,087	2,085	2,083	2,087	2,086	2,087	2,088	2,088	2,089	2,082	2,088	2,087	2,091	2,098
Computer and office equipment	351	359	357	357	358	358	360	359	357	359	359	360	360	361	360
Electronic and other electrical equipment	1,625	1,650	1,646	1,652	1,651	1,650	1,652	1,651	1,656	1,654	1,649	1,648	1,647	1,645	1,645
Electronic components and accessories	582	613	609	614	614	615	615	614	616	615	613	611	611	611	615
Transportation equipment	1,785	1,765	1,757	1,759	1,726	1,763	1,773	1,775	1,766	1,784	1,764	1,764	1,772	1,780	1,792
Motor vehicles and equipment	968	954	956	957	924	958	965	967	950	967	955	950	952	956	962
Aircraft and parts	449	454	448	448	445	447	449	446	453	454	455	463	468	472	477
Instruments and related products	837	832	831	831	832	832	834	835	832	833	831	833	830	833	831
Miscellaneous manufacturing industries	389	386	388	389	388	386	386	386	385	385	384	384	385	387	391
Nondurable goods	7,814	7,606	7,666	7,673	7,659	7,629	7,623	7,602	7,587	7,580	7,566	7,570	7,568	7,565	7,567
Production workers	5,489	5,316	5,368	5,373	5,356	5,335	5,331	5,308	5,301	5,287	5,284	5,288	5,286	5,284	5,283
Food and kindred products	1,680	1,654	1,672	1,675	1,675	1,666	1,664	1,647	1,640	1,641	1,639	1,641	1,647	1,651	1,661
Tobacco products	42	41	41	41	41	41	41	41	40	39	40	41	42	41	40
Textile mill products	667	636	640	644	642	636	637	637	637	633	631	633	628	629	630
Apparel and other textile products	930	847	868	873	863	859	853	847	849	837	835	834	829	823	815
Paper and allied products	692	677	684	682	681	677	679	676	672	673	674	674	675	675	675
Printing and publishing	1,543	1,528	1,533	1,531	1,531	1,527	1,525	1,528	1,527	1,527	1,527	1,528	1,525	1,525	1,527
Chemicals and allied products	1,035	1,021	1,026	1,025	1,027	1,024	1,025	1,020	1,019	1,021	1,017	1,017	1,017	1,015	1,017
Petroleum and coal products	144	139	140	140	140	139	139	140	139	139	139	138	139	137	136
Rubber and miscellaneous plastics products	976	968	964	963	960	962	963	969	968	976	971	971	974	975	972
Leather and leather products	106	96	98	99	99	98	97	97	96	94	93	93	92	94	94
SERVICE-PRODUCING	92,997	95,296	93,958	94,325	94,541	94,719	95,073	95,263	95,508	95,754	95,793	96,027	96,173	96,394	96,633
Transportation and public utilities	6,165	6,316	6,254	6,270	6,289	6,294	6,311	6,329	6,333	6,342	6,337	6,338	6,350	6,341	6,357
Transportation	3,918	4,034	3,980	3,994	4,008	4,015	4,028	4,045	4,051	4,056	4,052	4,059	4,062	4,060	4,076
Railroad transportation	239	232	235	234	233	233	232	231	229	230	230	231	229	229	229
Local and interurban passenger transit	423	451	436	439	441	442	450	454	458	463	458	458	460	462	467
Trucking and warehousing	1,867	1,878	1,874	1,879	1,883	1,882	1,891	1,891	1,888	1,882	1,877	1,877	1,870	1,856	1,863
Water transportation	174	172	172	171	171	173	167	171	172	173	171	172	172	171	175
Transportation by air	788	847	822	827	834	837	837	844	848	850	855	859	868	879	877
Pipelines, except natural gas	15	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Transportation services	413	440	427	430	432	434	437	440	442	444	447	448	449	449	451
Communications and public utilities	2,247	2,282	2,274	2,276	2,281	2,279	2,283	2,284	2,282	2,286	2,285	2,279	2,288	2,281	2,281
Communications	1,333	1,387	1,367	1,371	1,378	1,378	1,384	1,388	1,391	1,398	1,398	1,393	1,401	1,396	1,398
Electric, gas, and sanitary services	914	895	907	905	903	901	899	896	891	888	887	886	887	885	883
Wholesale trade	6,412	6,587	6,512	6,529	6,548	6,550	6,567	6,575	6,585	6,603	6,619	6,643	6,651	6,655	6,662
Retail trade	21,173	21,597	21,268	21,340	21,343	21,422	21,499	21,575	21,671	21,672	21,702	21,803	21,857	21,930	21,949
Building materials and garden supplies	871	915	882	880	887	896	907	917	922	923	930	936	942	947	940
General merchandise stores	2,678	2,723	2,651	2,674	2,681	2,679	2,728	2,721	2,732	2,745	2,737	2,765	2,770	2,780	2,751
Department stores	2,348	2,402	2,330	2,354	2,362	2,358	2,409	2,408	2,413	2,422	2,415	2,442	2,444	2,454	2,434

See footnotes at end of table.

12. Continued—Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted

[In thousands]

Industry	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[P]	Jan.[P]
Food stores	3,364	3,429	3,399	3,401	3,402	3,401	3,416	3,420	3,435	3,442	3,440	3,454	3,462	3,463	3,473
Automotive dealers and service stations	2,190	2,274	2,227	2,234	2,242	2,253	2,259	2,272	2,285	2,291	2,297	2,303	2,309	2,312	2,318
New and used car dealers	996	1,030	1,011	1,015	1,020	1,025	1,027	1,030	1,034	1,037	1,039	1,041	1,042	1,043	1,047
Apparel and accessory stores	1,127	1,102	1,100	1,099	1,100	1,098	1,100	1,101	1,103	1,098	1,100	1,108	1,106	1,103	1,114
Furniture and home furnishings stores	942	978	949	949	951	957	963	972	981	989	991	998	1,005	1,016	1,018
Eating and drinking places	7,350	7,485	7,405	7,440	7,413	7,469	7,454	7,485	7,528	7,489	7,504	7,517	7,527	7,557	7,575
Miscellaneous retail establishments	2,652	2,692	2,655	2,663	2,667	2,669	2,672	2,680	2,685	2,695	2,703	2,722	2,736	2,752	2,760
Finance, insurance, and real estate	6,830	6,977	6,894	6,919	6,932	6,942	6,964	6,967	6,987	6,999	7,009	7,026	7,038	7,054	7,063
Finance	3,238	3,324	3,277	3,288	3,293	3,303	3,315	3,319	3,329	3,339	3,341	3,355	3,361	3,371	3,381
Depository institutions	2,026	2,028	2,022	2,023	2,020	2,023	2,026	2,029	2,030	2,028	2,029	2,035	2,035	2,035	2,037
Commercial banks	1,467	1,471	1,467	1,467	1,464	1,467	1,469	1,469	1,472	1,471	1,474	1,478	1,479	1,480	1,485
Savings institutions	275	264	266	266	266	266	267	268	265	265	261	260	258	257	256
Nondepository institutions	462	513	490	496	501	505	507	509	514	519	522	526	530	534	539
Security and commodity brokers	523	541	529	531	532	534	538	541	543	548	547	549	552	556	558
Holding and other investment offices	227	242	236	238	240	241	244	240	242	244	243	245	244	246	247
Insurance	2,238	2,259	2,253	2,255	2,258	2,256	2,261	2,259	2,261	2,259	2,265	2,263	2,264	2,266	2,260
Insurance carriers	1,541	1,550	1,547	1,547	1,549	1,549	1,552	1,551	1,553	1,551	1,554	1,551	1,550	1,552	1,548
Insurance agents, brokers, and service	697	709	706	708	709	707	709	708	708	708	711	712	714	714	712
Real estate	1,354	1,394	1,364	1,376	1,381	1,383	1,388	1,389	1,397	1,401	1,403	1,408	1,413	1,417	1,422
Services[1]	33,107	34,359	33,694	33,902	34,035	34,114	34,274	34,378	34,448	34,532	34,607	34,709	34,780	34,880	35,047
Agricultural services	579	613	593	602	603	606	605	615	619	619	617	621	628	620	630
Hotels and other lodging places	1,657	1,682	1,652	1,657	1,662	1,673	1,681	1,704	1,690	1,684	1,686	1,690	1,692	1,702	1,713
Personal services	1,164	1,178	1,170	1,174	1,174	1,179	1,177	1,174	1,174	1,179	1,182	1,184	1,185	1,191	1,187
Business services	6,786	7,174	6,942	7,026	7,058	7,085	7,152	7,188	7,225	7,269	7,267	7,292	7,285	7,321	7,391
Services to buildings	882	892	883	899	899	900	903	895	893	893	891	894	885	885	873
Personnel supply services	2,475	2,634	2,510	2,552	2,565	2,569	2,622	2,648	2,668	2,696	2,691	2,697	2,672	2,684	2,772
Help supply services	2,189	2,332	2,216	2,254	2,265	2,272	2,322	2,352	2,368	2,393	2,387	2,391	2,362	2,373	2,455
Computer and data processing services	1,080	1,200	1,140	1,148	1,155	1,169	1,184	1,195	1,206	1,218	1,226	1,239	1,251	1,264	1,276
Auto repair services and parking	1,020	1,091	1,051	1,059	1,066	1,072	1,078	1,085	1,096	1,105	1,108	1,117	1,121	1,130	1,134
Miscellaneous repair services	356	365	358	359	361	363	364	366	365	366	367	366	370	370	369
Motion pictures	489	526	513	515	520	517	525	529	532	524	539	536	530	538	535
Amusement and recreation services	1,436	1,518	1,490	1,505	1,519	1,517	1,516	1,504	1,514	1,515	1,522	1,534	1,545	1,563	1,575
Health services	9,257	9,566	9,427	9,463	9,499	9,520	9,555	9,565	9,576	9,591	9,621	9,642	9,666	9,680	9,723
Offices and clinics of medical doctors	1,606	1,672	1,638	1,644	1,650	1,659	1,668	1,674	1,677	1,681	1,686	1,689	1,694	1,699	1,717
Nursing and personal care facilities	1,693	1,742	1,718	1,722	1,728	1,733	1,740	1,744	1,747	1,749	1,751	1,754	1,757	1,760	1,763
Hospitals	3,784	3,852	3,822	3,833	3,842	3,844	3,851	3,847	3,849	3,849	3,863	3,869	3,875	3,879	3,891
Home health care services	626	658	648	653	655	658	658	658	656	658	661	663	668	665	666
Legal services	923	932	925	927	927	926	929	929	933	935	934	937	941	942	941
Educational services	1,959	2,002	1,969	1,985	1,991	1,994	1,987	2,001	2,017	2,014	2,005	2,015	2,025	2,023	2,022
Social services	2,333	2,394	2,362	2,372	2,377	2,385	2,395	2,395	2,390	2,392	2,410	2,416	2,420	2,416	2,427
Child day care services	564	571	567	568	569	569	571	570	568	577	575	580	579	576	582
Residential care	640	665	651	654	656	661	663	665	669	672	672	673	675	676	678
Museums and botanical and zoological gardens	80	85	83	83	83	84	85	85	85	85	85	85	86	87	87
Membership organizations	2,132	2,145	2,135	2,137	2,136	2,137	2,147	2,148	2,146	2,154	2,150	2,151	2,152	2,153	2,153
Engineering and management services	2,747	2,895	2,833	2,847	2,867	2,863	2,885	2,897	2,893	2,906	2,921	2,930	2,941	2,951	2,966
Engineering and architectural services	814	843	825	827	829	834	838	848	844	848	853	854	859	859	863
Management and public relations	817	905	873	881	894	892	897	900	903	907	917	922	935	942	945
Government	19,310	19,461	19,336	19,365	19,394	19,397	19,458	19,446	19,484	19,606	19,519	19,508	19,497	19,534	19,555
Federal	2,822	2,757	2,783	2,780	2,780	2,777	2,776	2,756	2,752	2,739	2,739	2,731	2,733	2,729	2,726
Federal, except Postal Service	1,978	1,901	1,930	1,926	1,922	1,920	1,918	1,906	1,897	1,888	1,883	1,878	1,873	1,870	1,866
State	4,642	4,645	4,625	4,636	4,640	4,645	4,655	4,654	4,659	4,674	4,658	4,640	4,640	4,647	4,641
Education	1,931	1,959	1,933	1,945	1,952	1,956	1,963	1,968	1,981	1,984	1,975	1,960	1,960	1,967	1,960
Other State government	2,711	2,685	2,692	2,691	2,688	2,689	2,692	2,686	2,678	2,690	2,683	2,680	2,680	2,680	2,681
Local	11,847	12,059	11,928	11,949	11,974	11,975	12,027	12,036	12,073	12,193	12,122	12,137	12,124	12,158	12,188
Education	6,603	6,740	6,646	6,659	6,675	6,682	6,690	6,719	6,768	6,862	6,787	6,794	6,798	6,803	6,825
Other local government	5,244	5,319	5,282	5,290	5,299	5,293	5,337	5,317	5,305	5,331	5,335	5,343	5,326	5,355	5,363

[1] Includes other industries not shown separately.

[P] = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

13. Average weekly hours of production or nonsupervisory workers on private nonfarm payrolls, by industry, monthly data seasonally adjusted

Industry	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[P]	Jan.[P]
PRIVATE SECTOR	34.5	34.4	33.8	34.5	34.5	34.3	34.2	34.7	34.2	34.4	34.7	34.3	34.6	34.8	34.1
GOODS-PRODUCING	41.0	41.0	39.7	41.1	40.8	41.0	40.9	41.1	41.0	41.1	41.0	41.0	41.1	41.3	40.8
MINING	44.7	45.3	44.1	45.3	45.7	45.0	45.2	45.9	44.9	44.8	45.4	45.4	44.8	45.8	44.4
MANUFACTURING	41.6	41.6	40.0	41.4	41.3	41.5	41.7	41.8	41.6	41.7	41.7	41.7	41.7	42.0	41.7
Overtime hours	4.4	4.5	4.1	4.3	4.3	4.6	4.6	4.6	4.4	4.5	4.5	4.4	4.5	4.6	4.6
Durable goods	42.4	42.4	40.9	42.2	42.0	42.4	42.5	42.6	42.3	42.5	42.5	42.4	42.4	42.8	42.4
Overtime hours	4.7	4.8	4.4	4.6	4.5	4.9	5.1	5.0	4.7	4.8	4.8	4.7	4.7	4.9	4.9
Lumber and wood products	40.6	40.8	39.1	40.6	40.6	40.8	41.0	41.2	41.1	40.9	40.9	40.9	41.0	40.9	40.2
Furniture and fixtures	39.6	39.4	35.7	39.1	39.4	39.2	39.7	39.5	39.7	39.5	39.5	39.5	39.8	40.3	39.9
Stone, clay, and glass products	43.0	43.3	42.1	43.5	43.2	43.4	43.2	43.5	43.2	43.2	43.2	43.3	43.2	43.5	42.1
Primary metal industries	44.0	44.2	43.2	44.1	43.9	43.9	44.2	44.2	44.0	44.5	44.5	44.4	44.1	44.6	44.5
Blast furnaces and basic steel products	44.4	44.5	44.3	44.9	44.5	44.1	44.4	44.5	44.3	44.2	44.4	44.6	44.7	44.9	45.2
Fabricated metal products	42.3	42.3	41.0	42.0	42.0	42.3	42.6	42.6	42.4	42.5	42.4	42.4	42.3	42.6	42.1
Industrial machinery and equipment	43.4	43.1	42.1	43.0	43.0	43.2	43.0	43.3	43.1	42.8	43.0	42.9	43.0	43.3	43.1
Electronic and other electrical equipment	41.6	41.5	40.3	41.6	41.4	40.9	41.3	41.6	41.2	41.7	41.6	41.5	41.4	41.9	41.3
Transportation equipment	43.8	44.0	42.4	43.1	42.2	44.6	44.5	44.4	43.9	44.7	44.3	43.9	44.1	44.6	44.8
Motor vehicles and equipment	44.9	44.9	43.3	43.7	42.1	46.0	46.5	45.7	45.5	46.4	45.2	44.7	44.6	45.1	45.8
Instruments and related products	41.4	41.7	40.2	41.8	41.7	41.4	41.6	41.9	41.4	41.7	41.9	41.7	41.8	42.0	41.6
Miscellaneous manufacturing	39.9	39.7	37.7	39.5	39.7	39.6	39.9	39.7	39.7	39.8	39.8	39.8	40.0	40.4	39.9
Nondurable goods	40.5	40.5	38.7	40.5	40.5	40.4	40.6	40.7	40.5	40.6	40.7	40.6	40.7	41.0	40.6
Overtime hours	4.0	4.1	3.8	4.0	4.0	4.2	4.0	4.2	4.1	4.0	4.1	4.1	4.1	4.3	4.3
Food and kindred products	41.1	41.0	39.9	41.2	41.1	41.1	41.2	41.0	40.8	40.6	41.0	41.1	41.2	41.5	41.0
Textile mill products	40.8	40.5	36.1	40.5	40.8	40.3	40.6	40.9	40.8	40.9	40.9	40.9	41.3	41.6	41.1
Apparel and other textile products	37.0	37.0	33.5	36.8	36.9	36.5	37.2	37.6	37.1	37.4	37.3	37.4	37.4	37.5	37.2
Paper and allied products	43.1	43.3	41.5	43.1	43.1	43.4	43.4	43.5	43.4	43.3	43.5	43.4	43.6	43.7	43.4
Printing and publishing	38.2	38.2	37.2	38.2	38.2	38.1	38.3	38.1	38.2	38.4	38.3	38.2	38.2	38.4	38.1
Chemicals and allied products	43.2	43.2	42.5	43.2	43.1	42.9	43.2	43.4	43.3	43.3	43.1	43.2	43.3	43.6	43.6
Rubber and miscellaneous plastics products	41.5	41.5	40.3	41.3	41.3	41.4	41.7	41.5	41.5	41.7	41.6	41.5	41.2	41.8	41.1
Leather and leather products	38.0	38.1	34.8	37.6	37.8	37.6	38.3	38.5	38.3	38.9	38.8	38.4	39.0	38.9	37.8
SERVICE-PRODUCING	32.7	32.7	32.2	32.7	32.8	32.5	32.5	33.0	32.5	32.6	33.0	32.6	32.8	33.0	32.4
TRANSPORTATION AND PUBLIC UTILITIES	39.5	39.7	38.8	39.8	39.9	39.4	39.2	40.0	39.4	39.7	40.1	39.6	39.9	40.0	39.4
WHOLESALE TRADE	38.3	38.3	37.8	38.3	38.3	38.1	38.0	38.7	38.0	38.3	38.5	38.1	38.3	38.6	38.0
RETAIL TRADE	28.8	28.8	28.3	28.8	28.9	28.6	28.8	29.0	28.6	28.8	28.9	28.7	29.0	28.9	28.6

[P] = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

14. Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls, by industry, seasonally adjusted

Industry	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[P]	Jan.[P]
PRIVATE SECTOR (in current dollars)	$ 11.44	$ 11.82	$11.62	$11.65	$11.68	$11.72	$11.74	$11.83	$11.81	$11.87	$11.91	$11.90	$11.99	$12.05	$12.06
Goods-producing	13.04	13.47	13.30	13.26	13.25	13.40	13.38	13.45	13.48	13.56	13.56	13.57	13.62	13.70	13.75
Mining	15.30	15.60	15.48	15.49	15.46	15.44	15.45	15.59	15.62	15.63	15.67	15.65	15.76	15.89	16.03
Construction	15.08	15.43	15.25	15.23	15.24	15.28	15.31	15.40	15.46	15.49	15.53	15.55	15.55	15.67	15.71
Manufacturing	12.37	12.78	12.63	12.56	12.55	12.74	12.73	12.77	12.79	12.89	12.87	12.88	12.94	13.00	13.06
Excluding overtime	11.74	12.12	12.00	11.93	11.91	12.09	12.06	12.12	12.15	12.22	12.21	12.21	12.27	12.30	12.36
Service-producing	10.89	11.27	11.06	11.11	11.16	11.15	11.18	11.29	11.25	11.30	11.36	11.35	11.45	11.50	11.50
Transportation and public utilities	14.23	14.52	14.39	14.43	14.47	14.49	14.50	14.55	14.52	14.61	14.58	14.50	14.59	14.62	14.76
Wholesale trade	12.43	12.84	12.58	12.63	12.70	12.71	12.71	12.91	12.81	12.88	12.99	12.91	13.05	13.18	13.08
Retail trade	7.69	7.98	7.83	7.85	7.88	7.90	7.93	8.00	7.96	8.01	8.01	8.09	8.13	8.15	8.17
Finance, insurance, and real estate	12.33	12.80	12.55	12.60	12.68	12.64	12.76	12.86	12.77	12.85	12.92	12.86	13.02	13.02	12.99
Services	11.39	11.80	11.59	11.62	11.67	11.65	11.69	11.79	11.78	11.82	11.89	11.90	12.02	12.07	12.07
PRIVATE SECTOR (in constant (1982) dollars)	7.40	7.40	7.41	7.42	7.40	7.40	7.39	7.44	7.41	7.45	7.45	7.42	7.45	7.47	–

– Data not available.

[P] = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

15. Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls, by industry

Industry	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]	Jan.[p]
PRIVATE SECTOR	$ 11.44	$ 11.82	$11.71	$11.69	$11.69	$11.75	$11.73	$11.76	$11.74	$11.77	$11.96	$11.96	$12.01	$12.06	$12.12
MINING	15.30	15.60	15.63	15.62	15.51	15.55	15.44	15.57	15.53	15.51	15.72	15.54	15.66	15.93	16.18
CONSTRUCTION	15.08	15.43	15.24	15.14	15.13	15.19	15.27	15.32	15.48	15.55	15.73	15.73	15.59	15.64	15.69
MANUFACTURING	12.37	12.78	12.66	12.57	12.54	12.73	12.71	12.75	12.79	12.79	12.90	12.84	12.93	13.08	13.07
Durable goods	12.94	13.34	13.18	13.13	13.05	13.29	13.27	13.32	13.35	13.38	13.51	13.42	13.49	13.65	13.64
Lumber and wood products	10.12	10.44	10.28	10.23	10.29	10.33	10.34	10.45	10.47	10.53	10.56	10.56	10.57	10.61	10.59
Furniture and fixtures	9.82	10.15	10.00	9.95	10.00	10.06	10.08	10.11	10.13	10.19	10.27	10.28	10.28	10.41	10.39
Stone, clay, and glass products	12.41	12.81	12.60	12.56	12.59	12.76	12.74	12.81	12.93	12.91	12.99	12.91	12.95	12.95	13.04
Primary metal industries	14.62	14.99	14.85	14.71	14.74	15.00	14.83	14.92	15.09	15.03	15.19	15.10	15.19	15.16	15.19
Blast furnaces and basic steel products	17.35	17.84	17.66	17.50	17.61	17.92	17.57	17.69	18.01	17.88	18.15	17.99	18.11	17.95	17.78
Fabricated metal products	12.12	12.48	12.35	12.29	12.28	12.43	12.42	12.49	12.48	12.51	12.64	12.52	12.58	12.76	12.73
Industrial machinery and equipment	13.25	13.59	13.45	13.40	13.36	13.44	13.45	13.52	13.55	13.64	13.77	13.71	13.81	13.99	13.94
Electronic and other electrical equipment	11.69	12.17	11.95	11.87	11.91	12.00	12.08	12.18	12.24	12.27	12.34	12.32	12.35	12.52	12.48
Transportation equipment	16.76	17.24	16.92	16.99	16.68	17.27	17.24	17.27	17.33	17.32	17.50	17.30	17.38	17.62	17.53
Motor vehicles and equipment	17.36	17.83	17.48	17.54	17.11	17.97	17.92	17.91	17.97	17.87	18.12	17.81	17.93	18.20	18.10
Instruments and related products	12.71	13.14	12.99	12.94	12.97	13.03	13.04	13.09	13.18	13.18	13.31	13.26	13.33	13.41	13.45
Miscellaneous manufacturing	10.06	10.40	10.32	10.26	10.25	10.35	10.36	10.35	10.39	10.39	10.49	10.48	10.54	10.62	10.59
Nondurable goods	11.58	11.97	11.92	11.80	11.83	11.93	11.89	11.93	12.01	11.96	12.02	12.01	12.12	12.25	12.23
Food and kindred products	10.94	11.22	11.09	11.05	11.11	11.21	11.20	11.24	11.27	11.18	11.21	11.18	11.41	11.48	11.41
Tobacco products	19.48	19.54	18.51	18.32	19.55	20.55	21.19	21.52	21.09	20.44	18.65	17.99	18.88	18.92	18.92
Textile mill products	9.41	9.68	9.56	9.54	9.55	9.65	9.61	9.67	9.67	9.71	9.77	9.72	9.76	9.90	9.90
Apparel and other textile products	7.64	7.95	7.87	7.81	7.85	7.94	7.93	7.98	7.94	7.93	7.99	8.02	8.01	8.14	8.12
Paper and allied products	14.23	14.68	14.59	14.43	14.45	14.61	14.59	14.64	14.79	14.70	14.74	14.75	14.87	14.96	14.87
Printing and publishing	12.33	12.64	12.48	12.48	12.52	12.52	12.53	12.53	12.62	12.69	12.82	12.80	12.82	12.91	12.91
Chemicals and allied products	15.63	16.20	16.10	15.98	16.03	16.17	16.07	16.15	16.19	16.25	16.29	16.32	16.41	16.50	16.38
Petroleum and coal products	19.36	19.30	19.40	19.53	19.20	19.30	18.97	18.86	19.00	18.96	19.33	19.32	19.59	20.25	20.46
Rubber and miscellaneous plastics products	10.91	11.24	11.12	11.14	11.14	11.19	11.19	11.16	11.24	11.23	11.30	11.27	11.33	11.51	11.47
Leather and leather products	8.17	8.57	8.51	8.42	8.46	8.41	8.43	8.48	8.44	8.63	8.70	8.72	8.74	8.86	8.89
TRANSPORTATION AND PUBLIC UTILITIES	14.23	14.52	14.45	14.45	14.44	14.49	14.43	14.47	14.51	14.55	14.63	14.54	14.62	14.67	14.76
WHOLESALE TRADE	12.43	12.84	12.65	12.66	12.67	12.76	12.72	12.85	12.80	12.82	13.00	12.91	13.03	13.19	13.15
RETAIL TRADE	7.69	7.98	7.89	7.87	7.90	7.92	7.92	7.97	7.92	7.95	8.06	8.11	8.13	8.14	8.22
FINANCE, INSURANCE, AND REAL ESTATE	12.33	12.80	12.62	12.71	12.74	12.76	12.75	12.76	12.69	12.72	12.90	12.88	12.98	13.04	13.04
SERVICES	11.39	11.80	11.73	11.72	11.72	11.72	11.68	11.67	11.62	11.64	11.91	11.94	12.05	12.17	12.21

[p] = preliminary.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

Average weekly earnings of production or nonsupervisory workers on private nonfarm payrolls, by industry

Industry	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]	Jan.[p]
VATE SECTOR															
Current dollars	$394.68	$406.61	$391.11	$398.63	$399.80	$400.68	$402.34	$410.42	$406.20	$409.60	$417.40	$412.62	$414.35	$420.89	$410.87
Seasonally adjusted	–	–	392.76	401.93	402.96	402.00	401.51	410.50	403.90	408.33	413.28	408.17	414.85	419.34	411.25
Constant (1982) dollars	255.29	255.73	249.75	253.74	253.36	252.79	253.20	258.13	255.15	256.96	260.71	257.08	257.30	261.80	–
ING	683.91	706.68	684.59	704.46	697.95	698.20	697.89	716.22	695.74	702.60	723.12	713.29	712.53	734.37	716.77
NSTRUCTION	585.10	600.23	559.31	576.83	576.45	586.33	592.48	606.67	616.10	618.89	624.48	627.63	604.89	602.14	569.55
NUFACTURING															
Current dollars	514.59	531.65	503.87	519.14	517.90	524.48	528.74	534.23	525.67	534.62	545.67	538.00	544.35	559.82	542.41
Constant (1982) dollars	332.85	334.37	321.76	330.45	328.20	330.90	332.75	335.99	330.19	335.40	340.83	335.20	338.05	348.20	–
rable goods	548.66	565.62	539.06	552.77	548.10	558.18	562.64	568.76	556.69	568.65	582.28	571.69	578.72	596.51	575.61
Lumber and wood products	410.87	425.95	396.81	407.15	415.72	420.43	426.01	434.72	426.13	435.94	439.30	437.18	433.37	436.07	417.25
Furniture and fixtures	388.87	399.91	358.00	383.08	390.00	389.32	394.13	399.35	397.10	407.60	414.91	416.26	415.31	433.06	410.41
Stone, clay, and glass products	533.63	554.67	515.34	532.54	537.59	551.23	555.46	564.92	562.46	568.04	575.46	568.04	563.33	559.44	530.73
Primary metal industries	643.28	662.56	644.49	648.71	645.61	654.00	654.00	660.96	657.92	662.82	680.51	670.44	675.96	686.75	677.47
Blast furnaces and basic steel products	770.34	793.88	782.34	780.50	780.12	788.48	778.35	787.21	799.64	786.72	809.49	798.76	816.76	814.93	801.88
Fabricated metal products	512.68	527.90	505.12	516.18	514.53	519.57	525.37	533.32	519.17	532.93	543.52	534.60	539.68	557.61	535.93
Industrial machinery and equipment	575.05	585.73	568.93	580.22	578.49	573.89	578.35	585.42	574.52	582.43	596.24	588.16	597.97	622.56	603.60
Electronic and other electrical equipment	486.30	505.06	482.78	492.61	493.07	488.40	496.49	506.69	495.72	509.20	518.28	513.74	519.94	538.36	516.67
Transportation equipment	734.09	758.56	715.72	735.67	705.99	761.61	767.08	768.51	739.99	767.28	789.25	764.66	773.41	803.47	778.33
Motor vehicles and equipment	779.46	800.57	758.63	773.51	723.75	815.84	822.53	818.49	779.90	813.09	837.14	801.45	810.44	846.30	821.74
Instruments and related products	526.19	547.94	524.80	540.89	543.44	538.14	541.16	549.78	540.38	548.29	559.02	552.94	562.53	576.63	560.87
Miscellaneous manufacturing	401.39	412.88	388.03	403.22	407.95	407.79	410.26	410.90	404.17	414.56	423.80	422.34	428.98	434.36	418.31
ndurable goods	468.99	484.79	457.73	473.18	476.75	477.20	480.36	486.74	484.00	489.16	496.43	491.21	499.34	509.60	495.32
Food and kindred products	449.63	460.02	435.84	446.42	449.96	450.64	455.84	459.72	460.94	463.97	473.06	465.09	476.94	483.31	464.39
Tobacco products	771.41	781.60	662.66	710.82	772.23	809.67	847.60	884.47	816.18	819.64	783.30	741.19	777.86	796.53	737.88
Textile mill products	383.93	392.04	344.16	382.55	388.69	386.97	390.17	400.34	388.73	401.02	404.48	399.49	406.02	414.81	404.91
Apparel and other textile products	282.68	294.15	262.07	287.41	290.45	289.02	295.79	302.44	292.19	298.96	300.42	301.55	301.98	309.32	300.44
Paper and allied products	613.31	635.64	608.40	617.60	618.46	626.77	627.37	635.38	638.93	637.98	648.56	644.58	655.77	665.72	646.85
Printing and publishing	471.01	482.85	458.02	472.99	478.26	474.51	476.14	474.89	478.30	489.83	497.42	491.52	496.13	503.49	486.71
Chemicals and allied products	675.22	699.84	682.64	688.74	690.89	692.08	691.01	700.91	694.55	697.13	705.36	705.02	717.12	732.60	714.17
Petroleum and coal products	846.03	841.48	836.14	835.88	825.60	837.62	808.12	843.04	839.80	832.34	854.39	842.35	861.96	888.98	955.48
Rubber and miscellaneous plastics products	452.77	466.46	448.14	460.08	460.08	459.91	465.50	465.37	458.59	467.17	475.73	468.83	471.33	490.33	473.71
Leather and leather products	310.46	326.52	294.45	312.38	318.94	315.38	322.03	331.57	318.19	336.57	341.04	340.08	343.48	348.20	333.38
ANSPORTATION AND UBLIC UTILITIES	562.09	576.44	556.33	569.33	570.38	568.01	567.10	580.25	577.50	583.46	589.59	578.69	583.34	586.80	577.12
OLESALE TRADE	476.07	491.77	475.64	481.08	482.73	486.16	485.90	498.58	487.68	492.29	501.80	494.45	499.05	510.45	497.07
TAIL TRADE	221.47	229.82	216.98	221.93	225.15	224.93	227.30	234.32	232.85	234.53	234.55	232.76	233.33	238.50	229.34
ANCE, INSURANCE, ND REAL ESTATE	442.65	459.52	448.01	453.75	454.82	454.26	453.90	465.74	450.50	454.10	470.85	459.82	464.68	478.57	464.22
RVICES	369.04	382.32	373.01	377.38	377.38	377.38	376.10	382.78	377.65	380.63	388.27	386.86	390.42	397.96	390.72

Data not available.

preliminary.

TE: See "Notes on the data" for a description of the most recent benchmark revision.

17. Diffusion indexes of employment change, seasonally adjusted

[In percent]

Timespan and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov	Dec.
	Private nonfarm payrolls, 356 industries											
Over 1-month span:												
1994	58.8	62.1	66.0	64.2	60.3	63.5	61.5	62.1	60.8	61.5	63.1	63.9
1995	63.2	59.3	54.9	54.6	51.4	55.1	54.1	57.4	51.8	54.8	56.3	59.4
1996	52.4	63.2	60.0	52.4	62.2	57.4	55.8	57.3	52.7	63.1	57.2	59.6
1997	56.6	–	–	–	–	–	–	–	–	–	–	–
Over 3-month span:												
1994	67.1	69.5	70.4	68.7	66.4	66.0	68.5	69.5	65.3	65.6	68.0	67.8
1995	66.6	63.2	56.9	53.4	54.2	52.9	56.6	53.8	54.2	54.6	58.3	57.0
1996	60.7	61.8	61.2	60.0	61.0	63.6	60.3	56.7	60.8	60.0	65.9	61.8
Over 6-month span:												
1994	70.8	71.6	69.0	69.8	69.5	69.5	69.2	69.0	69.2	68.5	69.1	66.6
1995	66.3	60.8	58.7	54.4	53.5	54.1	53.1	56.3	55.9	54.1	56.2	61.8
1996	60.3	62.9	63.8	63.8	62.6	59.0	65.2	62.6	62.4	64.0	–	–
Over 12-month span:												
1994	70.2	71.6	71.8	71.8	72.1	71.8	71.5	72.1	70.1	69.4	65.7	65.0
1995	62.6	60.8	60.1	61.2	58.1	57.7	54.5	58.7	58.6	57.3	59.4	59.8
1996	61.0	61.7	61.5	61.1	62.8	65.2	63.9	–	–	–	–	–
	Manufacturing payrolls, 139 industries											
Over 1-month span:												
1994	56.5	60.1	59.7	58.6	53.2	57.9	57.6	53.6	55.8	54.7	57.2	59.4
1995	56.8	55.0	46.0	45.3	39.2	40.3	45.0	45.0	42.4	45.3	46.4	47.5
1996	42.1	48.2	48.2	39.6	53.2	49.6	43.9	50.0	44.6	54.3	48.2	55.0
1997	49.3	–	–	–	–	–	–	–	–	–	–	–
Over 3-month span:												
1994	63.7	64.4	66.2	60.8	56.1	56.8	60.8	58.6	54.0	56.1	60.1	60.8
1995	60.4	51.8	43.5	34.9	33.1	32.0	33.1	35.6	38.8	39.6	40.6	38.8
1996	38.8	39.9	37.8	43.2	45.3	47.5	45.7	40.6	50.7	47.1	54.7	49.3
Over 6-month span:												
1994	62.2	64.4	60.4	61.5	59.0	56.8	56.5	57.2	60.1	55.8	59.7	55.8
1995	55.4	45.0	38.5	33.5	27.7	28.8	28.8	30.6	33.5	33.1	34.2	38.8
1996	32.0	37.4	37.1	38.1	42.4	37.8	48.6	43.5	46.0	50.7	–	–
Over 12-month span:												
1994	57.9	58.6	60.8	60.8	60.8	63.3	59.4	60.1	57.2	55.8	49.6	47.5
1995	42.1	40.3	39.9	40.6	34.5	31.7	25.9	28.8	28.1	24.1	27.0	29.1
1996	33.1	33.1	33.8	35.6	37.1	42.8	40.3	–	–	–	–	–

– Data not available.

NOTE: Figures are the percent of industries with employment increasing plus one-half of the industries with unchanged employment, where 50 percent indicates an equal balance between industries with increasing and decreasing employment. Data for the 2 most recent months shown in each span are preliminary. See the "Definitions" in this section. See "Notes on the data" for a description of the most recent benchmark revision.

18. Annual data: Employment status of the population

[Numbers in thousands]

Employment status	1988	1989	1990	1991	1992	1993	1994	1995	1996
Civilian noninstitutional population	184,613	186,393	189,164	190,925	192,805	194,838	196,814	198,584	200,591
Civilian labor force	121,669	123,869	125,840	126,346	128,105	129,200	131,056	132,304	133,943
Labor force participation rate	65.9	66.5	66.5	66.2	66.4	66.3	66.6	66.6	66.8
Employed	114,968	117,342	118,793	117,718	118,492	120,259	123,060	124,900	126,708
Employment-population ratio	62.3	63.0	62.8	61.7	61.5	61.7	62.5	62.9	63.2
Agriculture	3,169	3,199	3,223	3,269	3,247	3,115	3,409	3,440	3,443
Nonagricultural industries	111,800	114,142	115,570	114,499	115,245	117,144	119,651	121,460	123,264
Unemployed	6,701	6,528	7,047	8,628	9,613	8,940	7,996	7,404	7,236
Unemployment rate	5.5	5.3	5.6	6.8	7.5	6.9	6.1	5.6	5.4
Not in the labor force	62,944	62,523	63,324	64,578	64,700	65,638	65,758	66,280	66,647

19. Annual data: Employment levels by industry

[In thousands]

Industry	1988	1989	1990	1991	1992	1993	1994	1995	1996
Total employment	105,210	107,895	109,419	108,256	108,604	110,730	114,172	117,203	119,554
Private sector	87,824	90,117	91,115	89,854	89,959	91,889	95,044	97,892	100,094
Goods-producing	25,125	25,254	24,905	23,745	23,231	23,352	23,908	24,206	24,259
Mining	713	692	709	689	635	610	601	580	570
Construction	5,098	5,171	5,120	4,650	4,492	4,668	4,986	5,158	5,407
Manufacturing	19,314	19,391	19,076	18,406	18,104	18,075	18,321	18,468	18,282
Service-producing	80,086	82,642	84,514	84,511	85,373	87,378	90,264	92,997	95,296
Transportation and public utilities	5,514	5,625	5,793	5,762	5,721	5,829	5,993	6,165	6,316
Wholesale trade	6,030	6,187	6,173	6,081	5,997	5,981	6,162	6,412	6,587
Retail trade	19,023	19,475	19,601	19,284	19,356	19,773	20,507	21,173	21,597
Finance, insurance, and real estate	6,630	6,668	6,709	6,646	6,602	6,757	6,896	6,830	6,977
Services	25,504	26,907	27,934	28,336	29,052	30,197	31,579	33,107	34,359
Government	17,386	17,779	18,304	18,402	18,645	18,841	19,128	19,310	19,461
Federal	2,971	2,988	3,085	2,966	2,969	2,915	2,870	2,822	2,757
State	4,076	4,182	4,305	4,355	4,408	4,488	4,576	4,642	4,645
Local	10,339	10,609	10,914	11,081	11,267	11,438	11,682	11,847	12,059

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

20. Annual data: Average hours and earnings of production or nonsupervisory workers on nonfarm payrolls, by industry

Industry	1988	1989	1990	1991	1992	1993	1994	1995	1996
Private sector:									
Average weekly hours	34.7	34.6	34.5	34.3	34.4	34.5	34.7	34.5	34.4
Average hourly earnings (in dollars)	9.28	9.66	10.01	10.32	10.57	10.83	11.12	11.44	11.82
Average weekly earnings (in dollars)	322.02	334.24	345.35	353.98	363.61	373.64	385.86	394.68	406.61
Mining:									
Average weekly hours	42.3	43.0	44.1	44.4	43.9	44.3	44.8	44.7	45.3
Average hourly earnings (in dollars)	12.80	13.26	13.68	14.19	14.54	14.60	14.88	15.30	15.60
Average weekly earnings (in dollars)	541.44	570.18	603.29	630.04	638.31	646.78	666.62	683.91	706.68
Construction:									
Average weekly hours	37.9	37.9	38.2	38.1	38.0	38.5	38.9	38.8	38.9
Average hourly earnings (in dollars)	13.08	13.54	13.77	14.00	14.15	14.38	14.73	15.08	15.43
Average weekly earnings (in dollars)	495.73	513.17	526.01	533.40	537.70	553.63	573.00	585.10	600.23
Manufacturing:									
Average weekly hours	41.1	41.0	40.8	40.7	41.0	41.4	42.0	41.6	41.6
Average hourly earnings (in dollars)	10.19	10.48	10.83	11.18	11.46	11.74	12.07	12.37	12.78
Average weekly earnings (in dollars)	418.81	429.68	441.86	455.03	469.86	486.04	506.94	514.59	531.65
Transportation and public utilities:									
Average weekly hours	38.8	38.9	38.9	38.7	38.9	39.6	39.9	39.5	39.7
Average hourly earnings (in dollars)	12.26	12.60	12.97	13.22	13.45	13.62	13.86	14.23	14.52
Average weekly earnings (in dollars)	475.69	490.14	504.53	511.61	523.21	539.35	553.01	562.09	576.44
Wholesale trade:									
Average weekly hours	38.1	38.0	38.1	38.1	38.2	38.2	38.4	38.3	38.3
Average hourly earnings (in dollars)	9.98	10.39	10.79	11.15	11.39	11.74	12.06	12.43	12.84
Average weekly earnings (in dollars)	380.24	394.82	411.10	424.82	435.10	448.47	463.10	476.07	491.77
Retail trade:									
Average weekly hours	29.1	28.9	28.8	28.6	28.8	28.8	28.9	28.8	28.8
Average hourly earnings (in dollars)	6.31	6.53	6.75	6.94	7.12	7.29	7.49	7.69	7.98
Average weekly earnings (in dollars)	183.62	188.72	194.40	198.48	205.06	209.95	216.46	221.47	229.82
Finance, insurance, and real estate:									
Average weekly hours	35.9	35.8	35.8	35.7	35.8	35.8	35.8	35.9	35.9
Average hourly earnings (in dollars)	9.06	9.53	9.97	10.39	10.82	11.35	11.83	12.33	12.80
Average weekly earnings (in dollars)	325.25	341.17	356.93	370.92	387.36	406.33	423.51	442.65	459.52
Services:									
Average weekly hours	32.6	32.6	32.5	32.4	32.5	32.5	32.5	32.4	32.4
Average hourly earnings (in dollars)	8.88	9.38	9.83	10.23	10.54	10.78	11.04	11.39	11.80
Average weekly earnings (in dollars)	289.49	305.79	319.48	331.45	342.55	350.35	358.80	369.04	382.32

21. Employment Cost Index, compensation,[1] by occupation and industry group

[June 1989 = 100]

Series	1994	1995				1996				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
										Dec. 1996	
Civilian workers[2]	123.8	124.8	125.6	126.6	127.2	128.3	129.2	130.2	130.9	0.5	2.9
Workers, by occupational group:											
White-collar workers	124.4	125.5	126.3	127.4	128.0	129.1	130.0	131.3	131.9	.5	3.0
Professional specialty and technical	126.2	127.0	127.5	128.9	129.4	130.6	131.4	132.6	133.1	.4	2.9
Executive, administrative, and managerial	123.6	125.2	125.7	126.7	127.4	128.5	129.1	131.1	131.5	.3	3.2
Administrative support, including clerical	125.2	126.5	127.3	128.1	129.0	130.1	130.8	132.0	132.6	.5	2.8
Blue-collar workers	122.7	123.6	124.5	125.2	125.8	126.7	127.7	128.3	129.1	.6	2.6
Service occupations	124.3	125.0	125.8	126.7	127.4	128.0	128.7	129.7	131.0	1.0	2.8
Workers, by industry division:											
Goods-producing	124.4	125.3	126.0	126.5	127.4	128.3	129.3	130.1	130.9	.6	2.7
Manufacturing	125.1	126.2	126.9	127.3	128.3	129.3	130.4	131.3	132.1	.6	2.6
Service-producing	123.6	124.6	125.5	126.6	127.1	128.2	129.1	130.2	130.9	.5	3.0
Services	126.4	127.2	127.8	128.9	129.4	130.4	131.2	132.5	133.2	.5	2.9
Health services	128.5	129.4	130.2	131.1	132.0	132.5	133.4	134.1	134.4	.2	1.8
Hospitals	128.4	128.8	129.7	130.4	131.4	132.3	132.9	133.6	133.8	.1	1.8
Educational services	126.4	126.9	127.4	129.8	130.2	130.5	130.8	133.2	133.9	.5	2.8
Public administration[3]	124.2	125.4	126.1	127.4	128.3	129.2	129.6	130.7	131.8	.8	2.7
Nonmanufacturing	123.4	124.4	125.2	126.3	126.8	127.9	128.8	129.8	130.5	.5	2.9
Private industry workers	123.5	124.5	125.4	126.2	126.7	127.9	129.0	129.8	130.6	.6	3.1
Excluding sales occupations	123.9	125.0	125.7	126.5	127.1	128.3	129.2	130.2	130.8	.5	2.9
Workers, by occupational group:											
White-collar workers	124.1	125.3	126.2	127.0	127.6	129.0	130.0	131.1	131.7	.5	3.2
Excluding sales occupations	125.1	126.3	127.0	127.8	128.6	129.9	130.7	132.0	132.5	.4	3.0
Professional specialty and technical occupations	126.8	127.7	128.4	129.3	129.9	131.6	132.6	133.3	133.7	.3	2.9
Executive, administrative, and managerial occupations	123.3	124.9	125.4	126.2	126.9	128.0	128.8	130.9	131.3	.3	3.5
Sales occupations	119.6	120.2	122.4	123.2	123.2	124.8	126.9	126.7	128.1	1.1	4.0
Administrative support occupations, including clerical	125.1	126.5	127.3	128.1	129.0	130.1	130.8	132.0	132.5	.4	2.7
Blue-collar workers	122.6	123.5	124.4	125.1	125.6	126.6	127.6	128.1	129.0	.7	2.7
Precision production, craft, and repair occupations	122.5	123.4	124.4	125.4	125.7	126.5	127.7	128.2	129.1	.7	2.7
Machine operators, assemblers, and inspectors	123.4	124.2	124.8	125.1	126.2	127.1	128.1	128.7	129.5	.6	2.6
Transportation and material moving occupations	120.6	121.8	122.4	122.9	123.0	123.9	124.7	124.9	125.2	.2	1.8
Handlers, equipment cleaners, helpers, and laborers	122.9	124.1	125.3	125.9	126.8	128.5	129.3	130.0	131.3	1.0	3.5
Service occupations	122.9	123.4	124.0	124.7	125.2	125.8	126.5	127.4	128.9	1.2	3.0
Production and nonsupervisory occupations[4]	123.1	124.1	125.0	125.8	126.3	127.5	128.6	129.2	130.0	.6	2.9
Workers, by industry division:											
Goods-producing	124.3	125.3	125.9	126.5	127.3	128.2	129.3	130.1	130.9	.6	2.8
Excluding sales occupations	124.0	124.9	125.6	126.1	127.0	128.0	129.0	129.8	130.5	.5	2.8
White-collar occupations	125.9	127.2	127.6	128.1	129.0	130.0	131.0	132.2	132.9	.5	3.0
Excluding sales occupations	125.0	126.2	126.7	127.2	128.2	129.4	130.2	131.5	132.1	.5	3.0
Blue-collar occupations	123.4	124.1	124.9	125.5	126.3	127.1	128.3	128.9	129.6	.5	2.6
Service occupations	126.3	127.3	127.9	128.8	129.5	129.6	130.1	–	–	–	–
Construction	120.8	121.1	122.0	123.1	123.4	124.3	125.3	125.9	126.4	.4	2.4
Manufacturing	125.1	126.2	126.9	127.3	128.3	129.3	130.4	131.3	132.1	.6	3.0
White-collar occupations	126.0	127.4	128.0	128.7	129.5	130.5	131.6	132.8	133.6	.6	3.2
Excluding sales occupations	124.9	126.1	126.6	127.4	128.3	129.5	130.5	131.8	132.5	.5	3.3
Blue-collar occupations	124.5	125.3	126.0	126.3	127.5	128.4	129.5	130.2	131.1	.7	2.8
Service occupations	127.0	128.0	128.6	129.5	130.2	130.3	131.0	–	–	–	–
Durables	125.8	127.0	127.7	128.2	129.0	129.7	131.2	131.9	132.6	.5	2.8
Nondurables	123.8	124.7	125.4	125.7	127.0	128.3	128.9	130.0	131.0	.8	3.1
Service-producing	122.8	123.9	124.9	125.8	126.2	127.6	128.6	129.5	130.2	.5	3.2
Excluding sales occupations	123.8	125.0	125.8	126.6	127.2	128.4	129.2	130.3	130.9	.5	2.9
White-collar occupations	123.4	124.6	125.6	126.5	127.1	128.5	129.6	130.6	131.1	.4	3.1
Excluding sales occupations	125.1	126.4	127.1	128.0	128.7	130.0	130.9	132.2	132.6	.3	3.0
Blue-collar occupations	120.7	122.1	123.1	123.9	124.0	125.2	126.0	126.4	127.3	.7	2.7
Service occupations	122.5	123.0	123.6	124.2	124.8	125.3	126.1	127.1	128.6	1.2	3.0
Transportation and public utilities	122.1	124.0	124.7	126.0	126.6	127.9	128.4	129.3	130.4	.9	3.0
Transportation	120.3	122.3	123.0	124.7	125.1	126.9	127.7	128.2	129.2	.8	3.3
Public utilities	124.4	126.1	126.8	127.5	128.5	128.9	129.1	130.4	131.7	1.0	2.5
Communications	124.0	126.3	126.6	127.4	128.3	128.0	127.5	129.1	131.1	1.5	2.2
Electric, gas, and sanitary services	124.8	125.9	127.0	127.7	128.7	130.1	131.1	132.0	132.4	.3	2.9
Wholesale and retail trade	120.8	121.7	122.8	123.8	124.2	125.5	126.4	127.5	128.6	.9	3.5
Excluding sales occupations	120.9	122.4	123.1	124.1	125.0	125.9	126.4	128.0	129.0	.8	3.2
Wholesale trade	121.5	123.2	124.8	126.1	127.0	127.5	129.3	129.9	130.9	.8	3.1
Excluding sales occupations	122.0	124.4	125.1	126.2	127.1	127.4	128.7	130.0	130.9	.7	3.0
Retail trade	120.1	120.9	121.8	122.6	122.7	124.5	124.8	126.2	127.4	1.0	3.8
Food stores	120.0	120.8	120.7	121.8	122.4	123.6	124.4	127.0	128.4	1.1	4.9
General merchandise stores	119.3	120.1	120.7	121.0	121.7	122.4	123.6	124.6	126.3	1.4	3.8

See footnotes at end of table.

21. Continued—Employment Cost Index, compensation,[1] by occupation and industry group

[June 1989 = 100]

Series	1994	1995				1996				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
										Dec. 1996	
Finance, insurance, and real estate	118.9	120.2	121.8	122.7	123.1	124.5	126.3	126.7	126.0	–.6	2.4
Excluding sales occupations	121.8	123.7	124.6	125.4	125.7	127.5	128.5	129.7	129.2	–.4	2.8
Banking, savings and loan, and other credit agencies	120.5	123.5	124.1	124.8	124.4	126.9	128.2	130.3	128.0	–1.8	2.9
Insurance	122.3	123.5	124.6	124.9	125.9	127.6	128.2	129.3	129.6	.2	2.9
Services	126.6	127.5	128.2	128.9	129.4	130.7	131.7	132.7	133.4	.5	3.1
Business services	123.0	124.5	125.3	125.7	126.3	128.9	129.2	130.2	131.8	1.2	4.4
Health services	128.7	129.7	130.3	131.3	132.2	132.6	133.5	134.2	134.5	.2	1.7
Hospitals	128.6	128.9	129.7	130.3	131.3	132.2	132.8	133.4	133.7	.2	1.8
Educational services	128.4	128.8	130.3	133.2	133.7	134.4	134.8	137.5	138.0	.4	3.2
Colleges and universities	128.8	129.3	131.3	134.6	135.2	135.9	136.2	138.6	139.1	.4	2.9
Nonmanufacturing	122.6	123.7	124.6	125.5	125.9	127.2	128.2	129.1	129.8	.5	3.1
White-collar workers	123.5	124.7	125.6	126.5	127.0	128.5	129.5	130.5	131.1	.5	3.2
Excluding sales occupations	125.1	126.4	127.1	128.0	128.6	130.0	130.8	132.1	132.5	.3	3.0
Blue-collar occupations	120.5	121.5	122.5	123.5	123.7	124.6	125.6	125.9	126.7	.6	2.4
Service occupations	122.4	123.0	123.5	124.2	124.7	125.3	126.0	127.0	128.6	1.3	3.1
State and local government workers	125.6	126.4	126.9	128.7	129.3	129.9	130.2	131.9	132.7	.6	2.6
Workers, by occupational group:											
White-collar workers	125.5	126.2	126.6	128.6	129.1	129.6	129.9	131.8	132.5	.5	2.6
Professional specialty and technical	125.5	126.0	126.3	128.4	128.8	129.1	129.5	131.6	132.3	.5	2.7
Executive, administrative, and managerial	125.3	126.9	127.4	129.1	129.9	130.7	131.0	132.0	132.9	.7	2.3
Administrative support, including clerical	125.6	126.3	126.9	128.4	129.1	130.0	130.4	131.8	133.0	.9	3.0
Blue-collar workers	124.7	125.4	126.3	127.2	128.0	129.0	129.5	130.3	131.2	.7	2.5
Workers, by industry division:											
Services	126.1	126.7	127.1	129.2	129.6	130.0	130.3	132.4	133.1	.5	2.7
Services excluding schools[5]	125.6	126.4	127.7	128.9	129.4	130.3	130.8	131.9	132.0	.1	2.0
Health services	127.7	128.4	129.8	131.0	131.6	132.5	133.1	134.0	134.1	.1	1.9
Hospitals	127.7	128.4	129.9	131.1	131.7	132.6	133.2	134.2	134.3	.1	2.0
Educational services	126.0	126.5	126.8	129.0	129.4	129.7	130.0	132.3	133.0	.5	2.8
Schools	126.3	126.8	127.1	129.4	129.8	130.0	130.3	132.6	133.4	.6	2.8
Elementary and secondary	126.5	127.1	127.4	129.8	130.1	130.2	130.5	132.6	133.1	.4	2.3
Colleges and universities	125.5	126.0	126.1	128.0	128.7	129.4	129.9	132.5	134.0	1.1	4.1
Public administration[3]	124.2	125.4	126.1	127.4	128.3	129.2	129.6	130.7	131.8	.8	2.7

[1] Cost (cents per hour worked) measured in the Employment Cost Index consists of wages, salaries, and employer cost of employee benefits.

[2] Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

[3] Consists of legislative, judicial, administrative, and regulatory activities.

[4] This series has the same industry and occupational coverage as the Hourly Earnings index, which was discontinued in January 1989.

[5] Includes, for example, library, social, and health services.

22. Employment Cost Index, wages and salaries, by occupation and industry group

[June 1989 = 100]

Series	1994	1995				1996				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
										Dec. 1996	
Civilian workers[1]	120.4	121.3	122.2	123.2	123.9	125.1	126.1	127.2	128.0	0.6	3.3
Workers, by occupational group:											
White-collar workers	121.5	122.4	123.1	124.3	125.1	126.3	127.3	128.6	129.3	.5	3.4
Professional specialty and technical	123.5	124.2	124.7	126.1	126.9	128.0	128.8	130.2	130.7	.4	3.0
Executive, administrative, and managerial	120.8	122.2	122.8	123.8	124.7	126.2	127.0	129.0	129.4	.3	3.8
Administrative support, including clerical	121.6	122.8	123.4	124.3	125.2	126.4	127.1	128.4	129.1	.5	3.1
Blue-collar workers	118.2	119.2	120.3	121.1	121.7	122.8	123.9	124.5	125.4	.7	3.0
Service occupations	120.4	121.2	121.8	122.8	123.4	124.2	124.9	126.2	127.6	1.1	3.4
Workers, by industry division:											
Goods-producing	119.6	120.5	121.4	122.1	122.9	123.9	125.1	126.1	126.8	.6	3.2
Manufacturing	120.8	121.9	122.9	123.5	124.3	125.4	126.5	127.7	128.4	.5	3.3
Service-producing	120.7	121.7	122.5	123.7	124.3	125.6	126.5	127.7	128.5	.6	3.4
Services	123.5	124.4	124.8	126.2	126.9	128.0	128.9	130.3	131.1	.6	3.3
Health services	125.4	126.1	126.6	127.5	128.4	129.3	130.0	130.8	131.4	.5	2.3
Hospitals	124.9	125.5	126.0	126.8	127.8	128.6	129.2	130.0	130.5	.4	2.1
Educational services	124.3	125.0	125.1	127.8	128.5	128.8	129.1	131.6	132.3	.5	3.0
Public administration[2]	120.6	121.9	122.3	123.2	124.1	124.9	125.3	126.6	127.7	.9	2.9
Nonmanufacturing	120.2	121.1	121.9	123.1	123.7	125.0	125.9	127.0	127.8	.6	3.3
Private industry workers	119.7	120.6	121.5	122.4	123.1	124.4	125.6	126.5	127.3	.6	3.4
Excluding sales occupations	120.0	121.0	121.8	122.6	123.4	124.7	125.7	126.8	127.5	.6	3.3
Workers, by occupational group:											
White-collar workers	120.8	121.7	122.7	123.6	124.3	125.8	127.0	128.0	128.7	.5	3.5
Excluding sales occupations	121.7	122.8	123.4	124.3	125.2	126.7	127.6	129.0	129.4	.3	3.4
Professional specialty and technical occupations	123.0	123.7	124.4	125.3	126.1	127.8	128.8	129.6	129.9	.2	3.0
Executive, administrative, and managerial occupations	120.5	121.9	122.5	123.4	124.4	125.9	126.8	128.9	129.3	.3	3.9
Sales occupations	116.7	116.9	119.3	120.5	120.4	122.0	124.4	123.9	125.9	1.6	4.6
Administrative support occupations, including clerical	121.6	122.9	123.5	124.3	125.3	126.5	127.3	128.5	129.2	.5	3.1
Blue-collar workers	118.0	119.0	120.1	120.8	121.4	122.5	123.7	124.3	125.1	.6	3.0
Precision production, craft, and repair occupations	117.9	118.8	119.9	121.0	121.4	122.4	123.7	124.2	125.1	.7	3.0
Machine operators, assemblers, and inspectors	118.8	119.6	120.9	121.4	122.3	123.4	124.5	125.4	126.4	.8	3.4
Transportation and material moving occupations	115.6	117.0	117.8	118.5	118.6	120.0	120.6	121.0	121.1	.1	2.1
Handlers, equipment cleaners, helpers, and laborers	118.9	120.1	121.2	121.5	122.6	124.2	125.1	125.8	127.1	1.0	3.7
Service occupations	118.8	119.4	120.0	120.8	121.4	122.2	123.0	124.1	125.7	1.3	3.5
Production and nonsupervisory occupations[3]	119.1	119.9	121.0	121.8	122.4	123.7	124.9	125.6	126.5	.7	3.3
Workers, by industry division:											
Goods-producing	119.6	120.4	121.4	122.1	122.9	123.9	125.1	126.1	126.8	.6	3.2
Excluding sales occupations	119.1	119.9	120.9	121.6	122.4	123.5	124.6	125.7	126.3	.5	3.2
White-collar occupations	122.0	123.0	123.8	124.4	125.3	126.2	127.3	128.6	129.1	.4	3.0
Excluding sales occupations	120.8	121.8	122.5	123.2	124.2	125.3	126.3	127.7	128.1	.3	3.1
Blue-collar occupations	118.1	118.8	119.9	120.7	121.4	122.4	123.7	124.5	125.3	.6	3.2
Service occupations	119.7	120.6	121.9	122.8	123.5	124.3	124.6	–	–	–	–
Construction	114.7	114.8	115.7	116.8	117.4	118.3	119.6	120.4	120.8	.3	2.9
Manufacturing	120.8	121.9	122.9	123.5	124.3	125.4	126.5	127.7	128.4	.5	3.3
White-collar occupations	122.7	123.9	124.7	125.3	126.1	127.1	128.2	129.6	130.1	.4	3.2
Excluding sales occupations	121.4	122.4	123.2	123.9	124.8	126.0	127.0	128.4	128.9	.4	3.3
Blue-collar occupations	119.5	120.4	121.6	122.2	123.1	124.2	125.4	126.3	127.3	.8	3.4
Service occupations	120.6	121.5	122.8	123.7	124.3	125.1	125.7	–	–	–	–
Durables	120.8	121.9	122.9	123.6	124.3	125.1	126.5	127.7	128.4	.5	3.3
Nondurables	120.8	121.9	122.9	123.3	124.4	125.8	126.5	127.6	128.5	.7	3.3
Service-producing	119.7	120.7	121.6	122.6	123.2	124.7	125.8	126.7	127.5	.6	3.5
Excluding sales occupations	120.7	121.8	122.5	123.4	124.2	125.6	126.5	127.6	128.3	.5	3.3
White-collar occupations	120.4	121.3	122.3	123.2	124.0	125.6	126.8	127.8	128.5	.5	3.6
Excluding sales occupations	122.1	123.2	123.8	124.7	125.6	127.2	128.1	129.5	129.9	.3	3.4
Blue-collar occupations	117.6	119.2	120.3	121.1	121.4	122.7	123.5	123.8	124.8	.8	2.8
Service occupations	118.7	119.3	119.8	120.7	121.3	122.0	122.8	124.0	125.6	1.3	3.5
Transportation and public utilities	119.6	121.2	122.0	122.9	123.7	124.6	125.0	125.9	127.0	.9	2.7
Transportation	117.5	119.0	119.8	121.0	121.6	122.9	123.2	123.8	124.7	.7	2.5
Public utilities	122.3	123.9	124.5	125.2	126.1	126.5	127.1	128.4	129.8	1.1	2.9
Communications	122.1	124.3	124.6	125.3	126.2	126.1	126.5	128.2	130.3	1.6	3.2
Electric, gas, and sanitary services	122.4	123.4	124.4	125.2	125.9	127.0	127.7	128.5	129.0	.4	2.5
Wholesale and retail trade	118.4	119.4	120.6	121.6	122.3	123.9	124.8	125.8	127.0	1.0	3.8
Excluding sales occupations	118.8	120.2	120.9	121.9	123.2	124.4	124.9	126.5	127.7	.9	3.7
Wholesale trade	119.9	120.9	122.7	123.9	125.5	126.1	128.0	128.5	129.6	.9	3.3
Excluding sales occupations	120.2	122.2	122.9	123.7	125.7	126.3	127.6	128.9	129.8	.7	3.3
Retail trade	117.8	118.7	119.6	120.5	120.6	122.8	123.1	124.4	125.8	1.1	4.3
Food stores	117.3	117.8	117.6	118.6	119.1	120.5	121.2	123.1	124.7	1.3	4.7
General merchandise stores	117.5	117.9	118.5	119.0	120.1	121.0	121.7	122.6	124.7	1.7	3.8

See footnotes at end of table.

22. Continued—Employment Cost Index, wages and salaries, by occupation and industry group

[June 1989 = 100]

Series	1994	1995				1996				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
										Dec. 1996	
Finance, insurance, and real estate	114.2	115.0	117.0	118.0	118.4	119.8	121.9	122.2	122.2	0.0	3.2
Excluding sales occupations	117.4	119.3	120.2	121.1	121.3	123.4	124.5	126.0	125.3	–.6	3.3
Banking, savings and loan, and other credit agencies	116.2	119.2	119.7	120.4	120.1	122.7	124.2	126.8	123.8	–2.4	3.1
Insurance	118.6	119.8	120.8	121.1	122.2	123.6	124.1	125.4	126.0	.5	3.1
Services	123.0	123.9	124.4	125.3	126.0	127.6	128.7	129.7	130.5	.6	3.6
Business services	120.4	122.1	122.9	123.6	124.3	126.9	127.7	128.5	130.1	1.2	4.7
Health services	125.4	126.2	126.7	127.5	128.4	129.3	130.1	130.8	131.4	.5	2.3
Hospitals	124.8	125.4	125.9	126.6	127.7	128.5	129.1	129.7	130.3	.5	2.0
Educational services	125.1	125.6	125.9	128.6	129.4	130.1	130.4	133.3	133.8	.4	3.4
Colleges and universities	124.9	125.5	125.9	129.0	130.1	130.6	130.9	133.4	133.8	.3	2.8
Nonmanufacturing	119.1	120.0	120.9	121.9	122.5	123.9	125.1	125.9	126.8	.7	3.5
White-collar workers	120.2	121.1	122.1	123.1	123.8	125.4	126.6	127.6	128.3	.5	3.6
Excluding sales occupations	121.8	122.9	123.5	124.4	125.4	126.9	127.8	129.2	129.6	.3	3.3
Blue-collar occupations	116.4	117.5	118.5	119.4	119.8	120.9	122.0	122.4	123.1	.6	2.8
Service occupations	118.6	119.2	119.8	120.6	121.2	122.0	122.7	123.9	125.5	1.3	3.5
State and local government workers	123.4	124.3	124.6	126.6	127.3	127.8	128.1	130.1	130.9	.6	2.8
Workers, by occupational group:											
White-collar workers	123.6	124.4	124.8	126.8	127.4	127.9	128.2	130.3	131.1	.6	2.9
Professional specialty and technical	124.2	124.8	125.0	127.4	128.0	128.3	128.6	131.1	131.7	.5	2.9
Executive, administrative, and managerial	122.4	124.1	124.3	126.0	126.9	127.7	128.0	129.3	130.2	.7	2.6
Administrative support, including clerical	121.7	122.5	122.9	124.4	125.1	125.8	126.1	127.7	129.0	1.0	3.1
Blue-collar workers	122.5	123.1	123.8	124.8	125.7	126.6	127.0	127.9	128.8	.7	2.5
Workers, by industry division:											
Services	124.2	124.9	125.1	127.6	128.2	128.6	128.9	131.2	131.9	.5	2.9
Services excluding schools[4]	124.0	125.0	125.5	126.9	127.4	128.2	128.7	130.1	130.5	.3	2.4
Health services	125.3	126.0	126.6	127.9	128.6	129.3	129.9	131.1	131.4	.2	2.2
Hospitals	125.1	125.8	126.3	127.6	128.4	129.1	129.7	130.9	131.3	.3	2.3
Educational services	124.2	124.8	124.9	127.7	128.3	128.5	128.8	131.3	132.0	.5	2.9
Schools	124.3	125.0	125.1	127.8	128.4	128.7	128.9	131.4	132.2	.6	3.0
Elementary and secondary	124.9	125.5	125.8	128.7	129.2	129.3	129.5	132.0	132.4	.3	2.5
Colleges and universities	122.5	123.2	122.9	125.0	125.9	126.8	127.1	129.8	131.2	1.1	4.2
Public administration[2]	120.8	121.9	122.3	123.2	124.1	124.9	125.3	126.6	127.7	.9	2.9

[1] Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

[2] Consists of legislative, judicial, administrative, and regulatory activities.

[3] This series has the same industry and occupational coverage as the Hourly Earnings index, which was discontinued in January 1989.

[4] Includes, for example, library, social, and health services.

23. Employment Cost Index, benefits, private industry workers by occupation and industry group

[June 1989 = 100]

Series	1994	1995				1996				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
										Dec. 1996	
Private industry workers	133.0	134.5	135.1	135.6	135.9	136.6	137.4	138.1	138.6	0.4	2.0
Workers, by occupational group:											
White-collar workers	133.3	135.2	136.0	136.6	136.7	137.7	138.4	139.5	139.7	.1	2.2
Blue-collar workers	132.5	133.3	133.6	134.1	134.7	135.2	136.1	136.2	137.0	.6	1.7
Workers, by industry division:											
Goods-producing	134.8	135.9	135.9	136.2	137.1	137.7	138.6	138.8	139.7	.6	1.9
Service-producing	131.5	133.2	134.1	134.8	134.7	135.5	136.2	137.2	137.4	.1	2.0
Manufacturing	134.3	135.4	135.2	135.5	136.7	137.5	138.5	138.8	139.8	.7	2.3
Nonmanufacturing	132.3	133.9	134.7	135.4	135.3	136.0	136.7	137.5	137.9	.3	1.9

24. Employment Cost Index, private nonfarm workers by bargaining status, region, and area size

[June 1989 = 100]

Series	1994	1995				1996				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
										Dec. 1996	
COMPENSATION											
Workers, by bargaining status[1]											
Union	124.2	125.1	125.8	126.8	127.7	128.5	129.7	130.1	130.8	0.5	2.4
Goods-producing	124.7	125.2	125.9	126.7	127.5	127.9	129.0	129.2	129.8	.5	1.8
Service-producing	123.6	124.8	125.6	126.8	127.9	129.0	130.3	131.0	131.7	.5	3.0
Manufacturing	125.8	126.3	126.6	127.1	128.1	128.8	129.8	129.8	130.6	.6	2.0
Nonmanufacturing	123.0	124.0	125.0	126.2	127.1	128.0	129.2	129.9	130.4	.4	2.6
Nonunion	123.2	124.3	125.2	126.0	126.5	127.7	128.7	129.7	130.4	.5	3.1
Goods-producing	124.1	125.2	125.9	126.4	127.2	128.3	129.4	130.4	131.3	.7	3.2
Service-producing	122.7	123.8	124.8	125.6	126.0	127.3	128.3	129.2	129.9	.5	3.1
Manufacturing	124.8	126.1	126.9	127.3	128.3	129.3	130.5	131.7	132.5	.6	3.3
Nonmanufacturing	122.5	123.6	124.5	125.3	125.7	127.0	128.0	128.9	129.6	.5	3.1
Workers, by region[1]											
Northeast	124.3	125.6	126.6	127.4	127.8	128.9	129.7	130.6	131.1	.4	2.6
South	122.5	123.7	124.3	125.2	125.6	127.0	127.8	128.8	129.7	.7	3.3
Midwest (formerly North Central)	125.0	125.8	126.9	127.7	128.3	129.5	130.7	131.3	132.1	.6	3.0
West	121.7	122.6	123.4	123.9	125.0	125.9	127.3	128.3	128.9	.5	3.1
Workers, by area size[1]											
Metropolitan areas	123.4	124.5	125.4	126.2	126.8	128.0	129.1	130.0	130.6	.5	3.0
Other areas	123.5	124.8	125.3	126.1	126.5	127.2	128.0	128.7	130.2	1.2	2.9
WAGES AND SALARIES											
Workers, by bargaining status[1]											
Union	119.1	119.8	120.6	121.5	122.2	122.8	124.2	124.8	125.4	.5	2.6
Goods-producing	117.9	118.4	119.3	120.2	120.6	121.3	122.5	123.2	123.6	.3	2.5
Service-producing	120.6	121.6	122.3	123.2	124.2	124.8	126.2	126.8	127.6	.6	2.7
Manufacturing	119.2	119.8	120.5	121.3	122.0	122.9	123.9	124.5	125.2	.6	2.6
Nonmanufacturing	119.0	119.9	120.6	121.6	122.3	122.8	124.3	124.9	125.5	.5	2.6
Nonunion	119.8	120.8	121.8	122.6	123.3	124.8	125.9	126.9	127.7	.6	3.6
Goods-producing	120.3	121.3	122.2	122.9	123.8	124.9	126.1	127.3	128.0	.5	3.4
Service-producing	119.5	120.5	121.5	122.4	123.0	124.6	125.7	126.6	127.5	.7	3.7
Manufacturing	121.5	122.7	123.8	124.3	125.2	126.3	127.5	128.8	129.6	.6	3.5
Nonmanufacturing	119.1	120.0	121.0	121.9	122.6	124.2	125.2	126.1	127.0	.7	3.6
Workers, by region[1]											
Northeast	120.2	121.3	122.1	123.1	123.6	124.9	126.0	127.0	127.7	.6	3.3
South	119.1	120.0	120.8	121.8	122.4	124.1	125.1	126.0	127.0	.8	3.8
Midwest (formerly North Central)	120.1	120.9	122.2	123.0	123.6	125.1	126.2	126.9	127.7	.6	3.3
West	119.0	119.9	120.9	121.4	122.7	123.3	124.8	125.8	126.5	.6	3.1
Workers, by area size[1]											
Metropolitan areas	119.7	120.6	121.6	122.4	123.2	124.6	125.8	126.7	127.4	.6	3.4
Other areas	119.0	120.5	121.3	122.1	122.4	123.4	124.2	125.0	126.5	1.2	3.3

[1] The indexes are calculated differently from those for the occupation and industry groups. For a detailed description of the index calculation, see the *Monthly Labor Review* Technical Note, "Estimation procedures for the Employment Cost Index," May 1982.

25. Percent of full-time employees participating in employer-provided benefit plans, 1980–91

Item	Medium and large private establishments[1]										Small private establishments[2]	State and local governments[3]	
	1980	1981	1982	1983	1984	1985	1986	1988	1989	1991	1990	1987	1990
Time-off plans													
Participants with:													
Paid lunch time	10	10	9	11	9	10	10	11	10	8	8	[4] 17	11
Average minutes per day	–	–	25	25	26	27	27	29	26	30	37	34	36
Paid rest time	75	75	76	74	73	72	72	72	71	67	48	[4] 58	56
Average minutes per day	–	–	25	25	26	26	26	26	26	26	27	29	29
Paid funeral leave	–	–	–	–	–	88	88	85	84	80	47	56	63
Average days per occurrence	–	–	–	–	–	3.2	3.2	3.2	3.3	3.3	2.9	3.7	3.7
Paid holidays	99	99	99	99	99	98	99	96	97	92	84	81	74
Average days per year	10.1	10.2	10.0	9.8	9.8	10.1	10.0	9.4	9.2	10.2	9.5	10.9	13.6
Paid personal leave	20	23	24	25	23	26	25	24	22	21	11	38	39
Average days per year	–	–	3.8	3.7	3.6	3.7	3.7	3.3	3.1	3.3	2.8	2.7	2.9
Paid vacations	100	99	99	100	99	99	100	98	97	96	88	72	67
Paid sick leave	62	65	67	67	67	67	70	69	68	67	47	97	95
Unpaid maternity leave	–	–	–	–	–	–	–	33	37	37	17	57	51
Unpaid sick leave	–	–	–	–	–	–	–	16	18	26	8	30	33
Insurance plans													
Participants in medical care plans	97	97	97	96	97	96	95	90	92	83	69	93	93
Participants with coverage for:													
Home health care	–	–	–	37	46	56	66	76	75	81	79	76	82
Extended care facilities	58	60	62	58	62	67	70	79	80	80	83	78	79
Mental health care	98	99	99	99	99	99	99	98	97	98	98	98	99
Alcohol abuse treatment	–	–	50	53	61	68	70	80	97	97	97	87	99
Drug abuse treatment	–	–	37	43	52	61	66	74	96	96	94	86	98
Participants with employee contribution required for:													
Self coverage	26	27	27	33	36	36	43	44	47	51	42	35	38
Average monthly contribution	–	–	–	$10.13	$11.93	$12.05	$12.80	$19.29	$25.31	$26.60	$25.13	$15.74	$25.53
Family coverage	46	49	51	54	58	56	63	64	66	69	67	71	65
Average monthly contribution[5]	–	–	–	$32.51	$35.93	$38.33	$41.40	$60.07	$72.10	$96.97	$109.34	$71.89	$ 117.59
Participants in life insurance plans	96	96	96	96	96	96	96	92	94	94	64	85	88
Participants with:													
Accidental death and dismemberment insurance	69	72	72	72	74	73	72	76	71	71	78	67	67
Survivor income benefits	–	–	–	–	–	13	10	8	7	6	1	1	1
Retiree protection available	–	64	64	66	64	62	59	49	42	44	19	55	45
Participants in long-term disability insurance plans	40	41	43	45	47	48	48	42	45	40	19	31	27
Participants in sickness and accident insurance plans	54	50	51	49	51	52	49	46	43	45	26	14	21
Retirement plans													
Participants in defined benefit pension plans[6]	84	84	84	82	82	80	76	63	63	59	20	93	90
Participants with:													
Normal retirement prior to age 65	55	56	58	64	63	67	64	59	62	55	54	92	89
Early retirement available	98	98	97	97	97	97	96	98	97	98	95	90	88
Ad hoc pension increases in last 5 years	–	–	–	51	47	41	35	26	22	7	7	33	16
Terminal earnings formula	53	50	52	54	54	57	57	55	64	56	58	100	100
Benefit coordinated with Social Security	45	43	45	55	56	61	62	62	63	54	49	18	8
Participants in defined contribution plans	–	–	–	–	–	[7] 53	[7] 60	45	48	48	31	9	9
Participants in plans with tax-deferred savings arrangements	–	–	–	–	–	26	33	36	41	44	17	28	45
Other benefits													
Employees eligible for:													
Flexible benefits plans	–	–	–	–	–	–	2	5	9	10	1	5	5
Reimbursement accounts	–	–	–	–	–	–	5	12	23	36	8	5	31

[1] From 1979 to 1986, data were collected in private sector establishments with a minimum employment varying from 50 to 250 employees, depending upon industry. In addition, coverage in service industries was limited. Beginning in 1988, data were collected in all private sector establishments employing 100 workers or more in all industries.

[2] Includes private sector establishments with fewer than 100 workers.

[3] In 1987, coverage excluded local governments employing fewer than 50 workers. In 1990, coverage included all State and local governments.

[4] Data exclude college teachers.

[5] Data for 1983 refer to the average monthly employee contribution for dependent coverage, excluding the employee. Beginning in 1984, the data refer to the average monthly employee contribution for family coverage, which includes the employee.

[6] Prior to 1985, data on participation in defined benefit pension plans included a small percentage of workers participating in money purchase pension plans. Beginning in 1985, these workers were classified as participating in defined contribution plans.

[7] Includes employees who participated in Payroll-based Employee Stock Ownership Plans. Beginning in 1987, these plans were no longer available.

NOTE: Dash indicates data were not collected in this year.

26. Work stoppages involving 1,000 workers or more

Measure	Annual totals		1995				1996						
	1994	1995	Sept.	Oct.	Nov.	Dec.	Jan.[p]	Feb.[p]	Mar.[p]	Apr.[p]	May[p]	June[p]	July[p]
Number of stoppages:													
Beginning in period	45	31	4	5	2	0	3	5	3	5	2	5	2
In effect during period	45	34	9	10	5	3	4	8	7	8	5	10	7
Workers involved:													
Beginning in period (in thousands)	322.2	191.5	11.8	41.2	4.5	0.0	34.0	20.5	138.1	5.7	15.5	23.9	3.6
In effect during period (in thousands)	322.2	206.7	29.3	62.6	51.0	46.5	36.5	54.1	147.8	10.4	20.1	44.0	24.8
Days idle:													
Number (in thousands)	3,981.0	5,771.2	509.0	995.3	940.0	391.0	634.2	254.6	1,350.3	120.5	284.2	630.1	383.8
Percent of estimated working time[1]	.02	.02	.02	.04	.04	.02	.03	.01	.05	.00	.01	.03	.02

[1] Agricultural and government employees are included in the total employed and total working time; private household, forestry, and fishery employees are excluded. An explanation of the measurement of idleness as a percentage of the total time worked is found in " 'Total economy' measures of strike idleness," *Monthly Labor Review*, October 1968, pp. 54–56.

[p] = preliminary.

27. Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.	Jan.
CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS															
All items	152.4	156.9	154.4	154.9	155.7	156.3	156.6	156.7	157.0	157.3	157.8	158.3	158.6	158.6	159.1
All items (1967 = 100)	456.5	469.9	462.5	464.2	466.5	468.2	469.0	469.5	470.4	471.1	472.7	474.1	475.0	475.0	476.7
Food and beverages	148.9	153.7	151.4	151.3	152.1	152.7	152.5	153.1	153.6	154.2	155.0	155.8	156.2	156.6	156.9
Food	148.4	153.3	151.0	150.8	151.6	152.3	152.0	152.6	153.2	153.7	154.6	155.4	155.9	156.3	156.5
Food at home	148.8	154.3	151.9	151.4	152.5	153.3	152.6	153.4	154.1	154.8	155.9	156.8	157.2	157.7	157.9
Cereals and bakery products	167.5	174.0	171.5	172.1	172.0	173.3	173.6	174.2	174.8	175.0	174.7	175.1	175.4	175.7	176.5
Meats, poultry, fish, and eggs	138.8	144.8	142.8	142.4	142.6	141.8	141.2	143.1	143.9	145.6	147.2	147.9	148.9	150.0	149.6
Dairy products	132.8	142.1	136.3	137.2	136.7	137.0	137.6	139.8	142.0	144.6	146.7	149.3	149.3	148.6	147.8
Fruits and vegetables	177.7	183.9	181.5	177.7	183.7	188.4	184.1	183.4	184.0	182.1	183.6	185.1	186.3	187.2	187.3
Other foods at home	140.8	142.9	141.8	141.9	142.4	142.8	142.9	142.9	142.9	143.2	143.6	143.9	143.4	143.6	144.8
Sugar and sweets	137.5	143.7	141.4	141.6	142.3	142.2	143.5	143.7	144.6	144.6	145.4	145.7	144.2	144.7	146.9
Fats and oils	137.3	140.5	139.7	139.7	140.1	139.9	140.0	140.8	140.5	140.9	141.5	141.6	140.8	140.7	142.3
Nonalcoholic beverages	131.7	128.6	130.0	129.9	129.7	129.9	129.3	128.4	127.5	128.5	127.9	127.6	127.2	126.9	128.3
Other prepared foods	151.1	156.2	153.1	153.4	154.6	155.3	155.6	156.2	156.8	156.4	157.5	158.5	158.3	158.9	159.4
Food away from home	149.0	152.7	150.6	150.9	151.2	151.6	152.0	152.3	152.8	153.1	153.5	154.2	154.7	155.0	155.3
Alcoholic beverages	153.9	158.5	155.6	156.7	157.4	157.9	158.3	158.6	158.5	158.9	159.5	160.1	160.2	160.5	161.1
Housing	148.5	152.8	150.6	151.2	151.7	151.8	152.0	152.7	153.6	154.0	153.9	154.0	153.9	154.0	155.1
Shelter	165.7	171.0	168.6	169.4	170.1	170.1	170.1	170.7	171.9	172.3	172.0	172.5	172.4	172.3	173.6
Renters' costs (12/82 = 100)	174.3	180.2	176.6	178.8	180.4	179.7	178.9	180.0	183.0	183.4	180.9	181.3	179.9	179.1	182.7
Rent, residential	157.8	162.0	160.0	160.4	160.6	160.9	161.2	161.7	162.2	162.5	162.9	163.3	163.7	164.0	164.4
Other renters' costs	204.3	214.7	206.5	214.1	219.7	216.1	211.8	214.9	225.4	225.9	214.8	214.9	207.9	203.8	217.3
Homeowners' costs (12/82 = 100)	171.0	176.5	174.3	174.6	175.0	175.3	175.6	176.0	176.6	177.0	177.5	178.1	178.6	178.8	179.1
Owners' equivalent rent (12/82 = 100)	171.3	176.8	174.7	175.0	175.3	175.6	175.9	176.3	176.9	177.3	177.9	178.4	178.9	179.1	179.5
Household insurance	157.4	161.0	158.0	158.6	159.1	159.4	159.5	160.7	162.0	162.3	162.3	163.4	164.6	162.4	162.6
Maintenance and repairs	135.0	139.0	136.3	137.0	137.5	138.0	138.8	138.8	139.4	139.7	139.9	140.2	141.1	141.5	141.5
Maintenance and repair services	139.8	145.5	142.1	143.0	143.8	143.8	144.7	144.6	146.3	147.1	147.4	147.3	147.6	148.0	148.2
Maintenance and repair commodities	128.5	130.2	128.6	128.8	129.0	130.0	130.9	130.9	130.1	129.6	129.5	130.5	132.3	132.6	132.5
Fuel and other utilities	123.7	127.5	124.7	125.0	125.2	125.4	126.7	128.4	129.0	129.4	129.8	128.7	128.4	129.4	130.8
Fuels	111.5	115.2	112.2	112.5	111.9	112.9	114.0	116.5	117.4	117.9	118.4	116.2	115.7	117.1	119.1
Fuel oil, coal, and bottled gas	88.1	99.2	97.6	97.7	99.3	102.1	99.6	94.6	92.3	92.2	95.6	102.9	105.9	110.3	111.5
Gas (piped) and electricity	119.2	122.1	118.7	119.1	118.2	118.9	120.6	124.1	125.6	126.1	126.2	122.7	121.7	122.8	124.9
Other utilities and public services	152.8	157.2	154.4	154.9	156.4	155.4	156.9	157.6	157.5	158.0	158.3	158.6	158.9	159.1	159.7
Household furnishings and operations	123.0	124.7	124.1	124.3	124.6	124.8	124.4	124.5	124.7	124.8	125.1	125.0	124.8	125.0	124.9
Housefurnishings	111.2	111.3	111.4	111.4	111.7	111.9	111.2	111.2	111.2	111.3	111.5	111.1	110.8	111.0	110.8
Housekeeping supplies	137.1	141.1	140.4	140.4	140.9	141.4	141.0	140.8	141.1	141.1	141.2	141.6	141.8	141.4	142.3
Housekeeping services	143.7	148.0	145.7	146.3	146.6	146.6	147.3	147.8	148.6	148.6	149.4	149.9	149.6	150.1	149.6
Apparel and upkeep	132.0	131.7	130.0	131.2	134.8	134.9	133.7	130.8	128.3	128.1	131.5	133.4	133.4	130.3	129.6
Apparel commodities	128.7	128.2	126.5	127.8	131.6	131.7	130.4	127.2	124.5	124.2	127.8	130.0	129.9	126.5	125.8
Men's and boys' apparel	126.2	127.7	124.7	126.4	129.1	129.0	129.5	127.1	125.1	126.2	127.4	129.2	131.2	127.8	127.0
Women's and girls' apparel	126.9	124.7	123.4	124.6	129.9	130.2	127.7	122.8	118.5	118.1	123.6	127.1	126.7	123.3	121.5
Infants' and toddlers' apparel	127.2	129.7	131.5	134.4	133.3	133.7	130.4	129.1	125.7	125.1	131.4	128.5	126.7	126.9	127.9
Footwear	125.4	126.6	123.4	125.8	128.1	128.2	128.3	127.1	125.6	124.7	126.7	128.0	127.7	125.9	125.0
Other apparel commodities	152.4	150.6	151.7	149.7	154.7	153.5	151.7	150.8	151.5	149.3	151.9	152.0	149.0	141.6	145.6
Apparel services	157.3	159.8	158.2	158.5	158.9	158.8	159.4	159.7	159.9	160.3	160.4	160.6	160.9	161.5	161.7
Transportation	139.1	143.0	139.9	140.4	141.2	143.1	144.4	144.0	143.5	142.8	143.2	143.9	144.8	145.2	145.0
Private transportation	136.3	140.0	137.4	137.5	138.3	140.3	141.7	141.0	140.5	139.9	140.0	140.5	141.5	141.7	141.8
New vehicles	141.0	143.7	143.2	143.5	143.6	143.5	143.4	143.5	143.2	142.9	143.2	143.8	144.8	145.4	145.4
New cars	139.0	141.4	141.1	141.3	141.5	141.3	141.2	141.3	141.0	140.7	141.0	141.5	142.3	143.0	143.0
Used cars	156.5	157.0	157.9	157.5	157.3	157.4	157.6	157.2	156.9	156.6	157.0	157.0	156.5	155.6	154.7
Motor fuel	100.0	106.3	98.6	98.2	101.4	108.6	113.6	111.2	108.9	106.4	106.2	105.9	107.8	108.6	108.6
Gasoline	99.8	105.9	98.2	97.8	101.1	108.2	113.3	111.0	108.8	106.1	105.7	105.2	107.1	107.9	107.9
Maintenance and repair	154.0	158.4	156.2	156.6	156.9	157.2	157.5	157.7	158.1	158.6	160.0	160.5	160.5	160.6	161.1
Other private transportation	170.6	173.9	172.7	173.2	172.5	173.0	173.1	173.1	173.5	174.1	174.1	175.4	176.2	176.0	176.2
Other private transportation commodities	104.8	105.1	105.4	105.4	105.3	105.1	104.9	104.6	104.7	104.8	105.0	105.0	105.1	105.2	105.2
Other private transportation services	186.0	190.1	188.5	189.2	188.3	189.0	189.1	185.2	189.7	190.4	190.3	192.0	193.0	192.7	193.0
Public transportation	175.9	181.9	171.6	177.4	178.9	179.3	108.2	182.5	182.7	181.4	184.6	187.2	187.3	189.9	185.8
Medical care	220.5	228.2	225.2	226.2	226.6	227.0	227.4	227.8	228.7	229.2	229.4	230.1	230.5	230.6	231.8
Medical care commodities	204.5	210.4	207.7	208.5	208.9	209.6	209.7	210.5	211.0	211.1	211.2	212.4	211.9	212.0	212.8
Medical care services	224.2	232.4	229.3	230.3	230.7	231.1	231.6	231.9	232.9	233.4	233.6	234.2	234.9	235.0	236.3
Professional services	201.0	208.3	205.0	206.1	206.5	207.0	207.7	207.9	208.7	209.2	209.6	210.2	210.9	211.0	212.2
Hospital and related services	257.8	269.5	265.1	266.4	266.8	267.0	267.6	268.8	270.3	271.2	271.6	272.4	273.2	273.7	275.7
Entertainment	153.9	159.1	157.0	158.3	158.4	158.6	158.8	159.0	159.0	159.2	159.8	160.1	160.7	160.8	161.3
Entertainment commodities	138.7	143.0	141.4	142.5	142.7	142.8	142.8	142.9	142.9	143.2	143.3	143.6	144.0	144.1	144.2
Entertainment services	172.0	178.1	175.5	177.0	177.0	177.2	177.6	177.9	178.0	178.0	179.1	179.5	180.3	180.5	181.3
Other goods and services	206.9	215.4	212.0	212.6	213.0	213.3	214.1	214.0	214.6	216.3	218.3	218.8	219.2	218.7	220.0
Tobacco products	225.7	232.8	229.3	229.8	230.8	230.5	233.1	232.9	233.3	233.4	234.1	235.3	236.2	234.3	236.4
Personal care	147.1	150.1	149.1	149.3	149.4	149.7	150.3	149.6	150.0	150.5	150.8	150.9	151.2	150.5	151.6
Toilet goods and personal care appliances	143.1	144.3	143.7	144.1	144.0	144.2	145.3	143.9	144.4	145.0	145.1	144.6	144.7	142.8	143.6
Personal care services	151.5	156.6	155.0	155.2	155.3	155.7	155.8	155.9	156.3	156.5	157.2	157.9	158.6	159.2	160.7
Personal and educational expenses	235.5	247.5	243.0	243.7	244.1	244.6	244.8	245.1	245.8	248.7	252.1	252.5	252.8	252.9	254.0
School books and supplies	214.4	226.9	223.8	224.7	225.2	225.5	224.7	224.7	224.7	227.6	229.9	230.5	230.7	231.1	234.5
Personal and educational services	237.3	249.3	244.7	245.4	245.7	246.3	246.6	246.8	247.6	250.5	254.0	254.3	254.7	254.8	255.8

27. Continued—Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.	Jan.
All items	152.4	156.9	154.4	154.9	155.7	156.3	156.6	156.7	157.0	157.3	157.8	158.3	158.6	158.6	159.1
Commodities	136.4	139.9	137.8	138.0	139.2	140.2	140.4	139.9	139.5	139.5	140.3	141.0	141.5	141.4	141.5
Food and beverages	148.9	153.7	151.4	151.3	152.1	152.7	152.5	153.1	153.6	154.2	155.0	155.8	156.2	156.6	156.9
Commodities less food and beverages	128.9	131.5	129.5	129.9	131.3	132.5	133.0	131.9	130.9	130.5	131.4	132.1	132.6	132.1	132.1
Nondurables less food and beverages	129.5	133.0	129.8	130.3	132.6	134.7	135.6	133.7	132.3	131.6	133.0	134.0	134.7	133.7	133.8
Apparel commodities	128.7	128.2	126.5	127.8	131.6	131.7	130.4	127.2	124.5	124.2	127.8	130.0	129.9	126.5	125.8
Nondurables less food, beverages, and apparel	132.9	138.6	134.5	134.6	136.2	139.3	141.4	140.1	139.3	138.5	138.7	139.2	140.3	140.5	141.0
Durables	128.0	129.4	129.3	129.4	129.5	129.5	129.3	129.3	129.1	128.9	129.2	129.3	129.6	129.9	129.7
Services	168.7	174.1	171.3	172.2	172.6	172.7	173.1	173.9	174.8	175.3	175.6	175.8	175.9	176.1	177.0
Rent of shelter (12/82 = 100)	172.4	178.0	175.5	176.3	177.0	177.0	177.0	177.6	178.9	179.3	179.0	179.4	179.4	179.3	180.6
Household services less rent of shelter (12/82 = 100)	138.3	142.0	139.0	139.5	139.6	139.6	141.0	143.1	143.9	144.4	144.6	143.2	142.9	143.4	144.6
Transporatation services	175.9	180.5	176.8	178.5	178.5	179.0	179.3	179.8	180.3	180.6	181.6	183.2	183.7	184.1	183.5
Medical care services	224.2	232.4	229.3	230.3	230.7	231.1	231.6	231.9	232.9	233.4	233.6	234.2	234.9	235.0	236.3
Other services	193.3	201.4	198.1	199.0	199.2	199.5	199.9	200.1	200.6	201.9	203.9	204.3	204.8	205.0	205.9
Special indexes:															
All items less food	153.1	157.5	155.0	155.7	156.5	157.0	157.4	157.5	157.7	157.9	158.4	158.8	159.0	159.0	159.6
All items less shelter	148.6	152.8	150.3	150.8	151.6	152.4	152.8	152.8	152.8	152.9	153.8	154.2	154.6	154.7	155.0
All items less homeowners' costs (12/82 = 100)	153.5	157.9	155.3	155.9	156.9	157.5	157.8	157.9	158.1	158.3	158.9	159.4	159.6	159.6	160.2
All items less medical care	148.6	152.8	150.4	150.9	151.7	152.3	152.6	152.7	153.0	153.2	153.8	154.2	154.5	154.5	155.0
Commodities less food	129.8	132.6	130.6	131.0	132.4	133.5	134.0	133.0	132.0	131.7	132.5	133.2	133.7	133.3	133.3
Nondurables less food	130.9	134.5	131.3	131.8	134.0	136.0	136.8	135.1	133.8	133.2	134.5	135.5	136.1	135.3	135.4
Nondurables less food and apparel	134.1	139.5	135.6	135.9	137.3	140.1	142.0	140.9	140.2	139.5	139.8	140.3	141.2	141.5	142.0
Nondurables	139.3	143.5	140.7	141.0	142.5	143.9	144.2	143.6	143.1	143.1	144.1	145.1	145.6	145.3	145.5
Services less rent of shelter (12/82 = 100)	176.8	182.5	179.2	180.2	180.4	180.6	181.4	182.4	183.1	183.7	184.6	184.6	184.8	185.2	185.9
Services less medical care	163.5	168.7	165.9	166.8	167.2	167.3	167.7	168.5	169.4	169.9	170.2	170.4	170.4	170.6	171.5
Energy	105.2	110.1	105.0	104.9	106.1	110.0	112.9	113.1	112.5	111.6	111.7	110.5	111.1	112.2	113.3
All items less energy	158.7	163.1	161.0	161.6	162.3	162.5	162.5	162.7	163.1	163.4	164.0	164.7	164.9	164.8	165.3
All items less food and energy	161.2	165.6	163.4	164.2	164.9	165.0	165.1	165.2	165.5	165.8	166.4	167.0	167.2	167.0	167.5
Commodities less food and energy	139.3	141.3	140.3	140.8	141.9	142.0	141.7	141.0	140.3	140.3	141.4	142.0	142.2	141.5	141.5
Energy commodities	98.8	105.7	98.7	98.3	101.4	108.1	112.3	109.5	107.2	105.0	105.2	105.8	107.9	109.1	109.2
Services less energy	173.7	179.4	176.6	177.6	178.1	178.2	178.4	179.0	179.9	180.4	180.7	181.2	181.4	181.5	182.4
Purchasing power of the consumer dollar:															
1982–84 = $1.00	.656	.638	.648	.645	.642	.640	.639	.638	.637	.636	.634	.632	.631	.631	.628
1967 = $1.00	.219	.213	.216	.215	.214	.214	.213	.213	.213	.212	.212	.211	.211	.211	.210
CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS															
All items	149.8	154.1	151.7	152.2	152.9	153.6	154.0	154.1	154.3	154.5	155.1	155.5	155.9	155.9	156.3
All items (1967 = 100)	446.1	459.1	451.9	453.2	455.6	457.6	458.7	459.1	459.7	460.2	461.9	463.2	464.2	464.3	465.7
Food and beverages	148.3	153.2	150.8	150.7	151.5	152.2	151.9	152.6	153.1	153.7	154.5	155.2	155.7	156.1	156.4
Food	147.9	152.8	150.5	150.3	151.1	151.7	151.5	152.1	152.8	153.4	154.1	154.9	155.4	155.8	156.1
Food at home	147.9	153.5	151.0	150.5	151.6	152.4	151.7	152.6	153.3	154.1	155.1	155.9	156.4	156.9	157.1
Cereals and bakery products	167.2	173.6	171.2	171.7	171.6	173.0	173.3	174.0	174.5	174.8	174.3	174.7	175.1	175.4	176.2
Meats, poultry, fish, and eggs	138.5	144.5	142.5	142.1	142.3	141.5	140.8	142.7	143.6	145.3	146.8	147.5	148.6	149.8	149.3
Dairy products	132.5	141.9	136.1	136.9	136.6	136.8	137.4	139.7	141.9	144.3	146.4	148.9	149.2	148.5	147.6
Fruits and vegetables	176.7	183.1	180.0	176.5	182.7	187.7	183.5	182.6	183.4	181.8	183.2	184.1	185.2	186.0	186.1
Other foods at home	140.3	142.6	141.4	141.5	142.1	142.4	142.5	142.5	142.6	142.8	143.2	143.5	143.0	143.2	144.4
Sugar and sweets	137.5	143.6	141.3	141.6	142.3	142.2	143.5	143.7	144.6	144.5	145.3	145.6	144.0	144.5	146.8
Fats and oils	137.1	140.3	139.6	139.6	139.9	139.7	139.7	140.6	140.2	140.6	141.2	141.3	140.5	140.4	141.9
Nonalcoholic beverages	131.0	128.1	129.5	129.4	129.2	129.4	128.8	127.9	127.1	128.0	127.4	127.1	126.7	126.5	127.9
Other prepared foods	150.8	156.0	152.9	153.2	154.4	155.1	155.4	155.9	156.6	156.3	157.2	158.2	158.2	158.8	159.3
Food away from home	148.8	152.6	150.6	150.9	151.1	151.6	152.0	152.3	152.7	153.1	153.4	154.2	154.7	155.0	155.4
Alcoholic beverages	153.3	157.9	155.0	156.1	156.8	157.3	157.6	157.9	157.8	158.2	158.9	159.5	159.6	159.9	160.4
Housing	145.4	149.6	147.5	148.0	148.5	148.6	148.9	149.6	150.4	150.7	150.8	150.7	150.7	151.0	151.8
Shelter	161.2	166.2	163.9	164.6	165.1	165.2	165.3	165.9	166.9	167.3	167.2	167.6	167.7	167.7	168.6
Renters' costs (12/84 = 100)	152.5	157.3	154.4	156.0	157.0	156.6	156.4	157.2	159.1	159.4	158.1	158.3	157.6	157.3	159.4
Rent, residential	157.4	161.6	159.7	160.1	160.3	160.6	160.9	161.3	161.9	162.2	162.6	162.9	163.4	163.7	164.1
Other renters' costs	204.4	214.6	205.5	214.0	219.6	215.6	212.0	215.3	226.0	226.5	215.0	214.6	207.4	203.7	216.3
Homeowners' costs (12/84 = 100)	156.0	160.9	159.0	159.3	159.6	159.8	160.1	160.5	161.0	161.4	161.9	162.4	162.8	163.0	163.3
Owners' equivalent rent (12/84 = 100)	156.2	161.2	159.3	159.5	159.8	160.1	160.4	160.8	161.3	161.7	162.2	162.7	163.1	163.4	163.7
Household insurance (12/84 = 100)	144.6	147.1	145.0	145.6	145.9	146.0	146.1	146.9	147.8	148.0	148.0	148.7	150.0	147.2	147.4
Maintenance and repairs	134.5	137.6	135.5	135.7	136.3	136.8	137.5	137.5	137.9	138.0	138.0	138.5	139.9	140.1	140.0
Maintenance and repair services	142.7	147.6	144.6	145.0	145.8	145.9	146.8	146.7	148.2	149.0	149.4	149.5	149.9	150.1	150.0
Maintenance and repair commodities	123.6	124.9	123.6	123.8	124.1	125.0	125.5	125.6	124.8	124.1	123.6	124.8	127.1	127.1	127.3
Fuel and other utilities	123.2	127.2	124.2	124.6	125.0	125.2	126.3	128.2	128.7	129.2	129.5	128.3	128.1	129.0	130.5
Fuels	110.8	114.7	111.4	111.8	111.5	112.3	113.4	116.1	117.0	117.5	117.9	115.6	115.1	116.5	118.5
Fuel oil, coal, and bottled gas	88.0	99.0	97.4	97.6	99.1	101.6	99.1	94.3	92.1	92.1	95.4	102.6	105.7	110.6	111.6
Gas (piped) and electricity	118.4	121.6	118.0	118.4	117.9	118.5	120.0	123.8	125.1	125.7	125.7	122.2	121.2	122.3	124.5
Other utilities and public services	153.2	157.7	154.8	155.4	157.0	156.1	157.5	158.2	158.0	158.5	158.8	159.2	159.5	159.6	160.3
Household furnishings and operations	121.8	123.2	122.8	122.9	123.2	123.4	123.0	123.1	123.2	123.3	123.6	123.4	123.3	123.5	123.4
Housefurnishings	109.9	109.9	110.0	110.0	110.2	110.5	109.8	109.9	109.8	110.0	110.1	109.7	109.5	109.8	109.5
Housekeeping supplies	137.3	141.5	140.6	140.7	141.3	141.7	141.3	141.2	141.6	141.8	141.8	142.1	142.4	142.0	142.8
Housekeeping services	146.8	150.9	149.0	149.4	149.6	149.7	150.1	150.5	151.1	151.2	152.2	152.5	152.4	152.9	152.6

27. Continued—Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group

[1982–84 = 100, unless otherwise indicated]

Series	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.	Jan.
Apparel and upkeep	130.9	130.9	129.1	130.2	133.9	134.2	133.2	130.2	127.9	127.5	130.6	132.4	132.4	129.3	128.7
Apparel commodities	127.7	127.6	125.8	127.0	130.9	131.2	130.1	126.9	124.3	123.8	127.2	129.2	129.1	125.7	125.1
Men's and boys' apparel	125.9	127.4	124.8	126.3	128.9	128.6	129.2	126.7	124.7	125.7	127.0	129.0	130.9	127.5	127.0
Women's and girls' apparel	125.4	123.6	122.3	123.3	128.6	129.5	127.1	122.1	118.1	117.4	122.2	125.4	125.0	121.7	119.9
Infants' and toddlers' apparel	128.1	130.8	132.3	135.3	134.7	134.8	131.5	130.1	126.8	126.7	132.4	128.9	127.7	128.1	128.5
Footwear	126.2	127.6	123.9	126.3	128.8	129.0	129.3	128.1	126.8	126.1	127.8	129.2	128.9	127.0	126.0
Other apparel commodities	150.6	149.6	149.1	146.9	153.7	153.0	151.5	150.5	150.9	147.8	151.4	151.9	148.7	139.7	144.6
Apparel services	156.8	159.0	157.6	157.9	158.2	158.2	158.8	159.0	159.3	159.6	159.7	159.7	160.0	160.5	160.8
Transportation	138.8	142.8	139.7	140.0	140.9	143.0	144.4	143.8	143.3	142.6	142.9	143.5	144.5	144.8	144.6
Private transportation	136.9	140.7	138.0	138.0	138.8	141.0	142.5	141.8	141.1	140.5	140.7	141.2	142.2	142.4	142.4
New vehicles	141.8	144.7	144.2	144.5	144.5	144.5	144.5	144.5	144.3	144.0	144.3	145.0	146.0	146.5	146.6
New cars	138.7	141.1	140.8	141.0	141.0	140.9	140.8	140.9	140.6	140.3	140.6	141.1	141.9	142.7	142.7
Used cars	157.3	158.2	158.9	158.6	158.3	158.5	158.7	158.3	158.1	157.8	158.2	158.3	157.7	156.8	155.9
Motor fuel	99.9	106.3	98.6	98.1	101.4	108.6	113.5	111.0	108.8	106.3	106.2	106.0	108.1	108.9	108.8
Gasoline	99.7	105.9	98.2	97.8	101.2	108.3	113.3	110.9	108.7	106.0	105.8	105.3	107.4	108.3	108.2
Maintenance and repair	154.8	159.3	157.1	157.6	157.9	158.2	158.4	158.6	158.9	159.6	160.8	161.4	161.4	161.4	162.0
Other private transportation	166.5	169.6	168.5	168.8	168.1	168.6	168.7	168.8	169.2	169.7	169.8	171.2	171.9	171.6	171.9
Other private transportation commodities	104.0	104.2	104.6	104.6	104.4	104.2	104.0	104.3	103.8	104.0	104.1	104.1	104.2	104.3	104.2
Other private transportation services	182.2	186.1	184.6	185.0	184.1	184.8	185.1	185.1	185.7	186.3	186.4	188.2	189.1	188.6	189.0
Public transportation	171.9	179.6	169.6	174.6	177.2	177.5	178.6	180.1	180.6	179.4	181.8	184.3	184.5	186.9	183.6
Medical care	219.8	227.6	224.5	225.6	226.0	226.4	226.8	227.3	228.2	228.5	228.8	229.4	229.9	230.1	231.1
Medical care commodities	202.2	207.8	205.4	206.1	206.5	207.0	207.1	208.0	208.5	208.5	208.5	209.8	209.1	209.4	210.1
Medical care services	223.8	232.1	228.9	230.1	230.4	230.7	231.3	231.6	232.6	233.1	233.3	233.9	234.6	234.7	235.9
Professional services	202.0	209.5	206.0	207.2	207.6	208.1	208.8	209.0	209.9	210.4	210.8	211.4	212.1	212.3	213.3
Hospital and related services	255.2	266.5	262.3	263.7	264.0	264.4	264.9	265.8	267.3	268.0	268.4	269.1	269.9	270.4	271.9
Entertainment	151.8	156.8	154.7	156.0	156.1	156.3	156.5	156.7	156.7	157.0	157.4	157.8	158.3	158.4	158.8
Entertainment commodities	137.9	142.0	140.3	141.4	141.7	141.8	141.9	141.9	141.8	142.2	142.2	142.5	142.8	142.9	142.9
Entertainment services	171.9	178.2	175.5	176.9	176.9	177.1	177.7	178.0	178.2	178.3	179.3	179.7	180.4	180.7	181.4
Other goods and services	204.2	212.2	209.0	209.6	209.9	210.1	211.2	211.0	211.6	213.0	214.7	215.3	215.8	215.2	216.7
Tobacco products	225.9	232.5	229.3	229.8	230.7	230.3	233.1	232.8	233.2	233.0	233.7	234.8	235.8	233.9	236.1
Personal care	147.3	150.1	149.1	149.2	149.3	149.6	150.3	149.6	150.0	150.4	150.8	150.9	151.3	150.4	151.6
Toilet goods and personal care appliances	143.8	145.0	144.4	144.6	144.6	144.7	146.0	144.6	145.0	145.6	145.7	145.4	145.4	143.5	144.4
Personal care services	151.5	156.6	154.9	155.1	155.2	155.7	155.8	156.0	156.2	156.5	157.2	158.0	158.7	159.4	160.8
Personal and educational expenses	231.2	242.9	238.5	239.3	239.5	240.1	240.3	240.6	241.4	244.2	247.3	247.7	248.1	248.3	249.7
School books and supplies	215.5	228.2	225.2	225.8	226.3	226.5	225.6	225.5	225.5	228.8	231.5	232.4	232.6	232.9	236.2
Personal and educational services	232.6	244.4	239.8	240.7	240.9	241.5	241.7	242.0	242.9	245.7	248.8	249.2	249.7	249.8	251.1
All items	149.8	154.1	151.7	152.2	152.9	153.6	154.0	154.1	154.3	154.5	155.1	155.5	155.9	155.9	156.3
Commodities	136.4	139.9	137.7	137.9	139.1	140.2	140.5	140.0	139.7	139.6	140.4	141.0	141.6	141.4	141.5
Food and beverages	148.3	153.2	150.8	150.7	151.5	152.2	151.9	152.6	153.1	153.7	154.5	155.2	155.7	156.1	156.4
Commodities less food and beverages	129.0	131.8	129.7	130.0	131.4	132.8	133.5	132.4	131.4	130.9	131.7	132.3	132.9	132.4	132.4
Nondurables less food and beverages	129.0	132.8	129.3	129.7	132.2	134.5	135.7	133.8	132.4	131.6	132.8	133.8	134.6	133.6	133.7
Apparel commodities	127.7	127.6	125.8	127.0	130.9	131.2	130.1	126.9	124.3	123.8	127.2	129.2	129.1	125.7	125.1
Nondurables less food, beverages, and apparel	132.6	138.3	133.9	134.0	135.7	139.1	141.5	140.1	139.2	138.2	138.4	139.0	140.2	140.4	140.9
Durables	127.9	129.2	129.1	129.3	129.3	129.4	129.2	129.2	129.0	128.9	129.2	129.2	129.5	129.6	129.5
Services	166.0	171.4	168.6	169.4	169.8	170.0	170.4	171.2	172.0	172.5	172.8	173.0	173.2	173.4	174.2
Rent of shelter (12/84 = 100)	155.0	159.9	157.7	158.4	158.9	159.0	159.1	159.6	160.6	161.0	160.9	161.3	161.3	161.4	162.3
Household services less rent of shelter (12/84 = 100)	127.0	130.5	127.6	128.0	128.4	128.4	129.6	131.6	132.3	132.7	133.0	131.5	131.2	131.7	132.9
Transporatation services	173.6	178.3	175.2	176.3	176.4	176.9	177.3	177.6	178.1	178.4	179.2	180.8	181.3	181.5	181.3
Medical care services	223.8	232.1	228.9	230.1	230.4	230.7	231.3	231.6	232.6	233.1	233.3	233.9	234.6	234.7	235.9
Other services	190.1	198.1	194.9	195.8	195.9	196.3	196.6	196.9	197.4	198.7	200.5	200.9	201.5	201.7	202.7
Special indexes:															
All items less food	150.0	154.3	151.8	152.4	153.2	153.9	154.4	154.4	154.5	154.6	155.2	155.5	155.8	155.8	156.3
All items less shelter	146.8	151.0	148.5	148.9	149.8	150.6	151.1	151.1	151.0	151.2	151.9	152.4	152.8	152.8	153.2
All items less homeowners' costs (12/84 = 100)	140.7	144.8	142.4	142.8	143.7	144.4	144.8	144.8	145.0	145.1	145.7	146.1	146.4	146.4	146.8
All items less medical care	146.4	150.7	148.3	148.7	149.5	150.2	150.5	150.6	150.8	151.0	151.6	152.0	152.3	152.4	152.8
Commodities less food	130.0	132.8	130.7	131.0	132.4	133.8	134.4	133.3	132.4	132.0	132.8	133.4	134.0	133.5	133.5
Nondurables less food	130.4	134.3	130.8	131.3	133.6	135.8	136.9	135.1	133.8	133.1	134.3	135.3	136.0	135.2	135.3
Nondurables less food and apparel	133.7	139.3	135.1	135.3	136.9	139.9	142.0	140.8	140.0	139.2	139.5	140.0	141.1	141.3	141.8
Nondurables	139.0	143.3	140.4	140.5	142.1	143.6	144.1	143.5	143.1	143.0	143.9	144.8	145.4	145.2	145.4
Services less rent of shelter (12/84 = 100)	157.6	162.7	159.8	160.5	160.7	161.0	161.7	162.6	163.3	163.8	164.5	164.4	164.7	165.0	165.7
Services less medical care	161.1	166.2	163.5	164.2	164.6	134.8	165.2	166.0	166.8	167.3	167.6	167.8	167.9	168.1	169.0
Energy	104.7	109.8	104.3	104.2	105.8	109.8	112.8	112.9	112.2	111.1	111.3	110.1	110.9	112.0	113.0
All items less energy	156.1	160.4	158.3	158.8	159.5	159.8	159.8	160.0	160.3	160.6	161.2	161.9	162.2	162.1	162.5
All items less food and energy	158.2	162.3	160.3	161.0	161.7	161.9	162.0	162.0	162.2	162.5	163.1	163.7	163.9	163.7	164.1
Commodities less food and energy	138.9	140.9	139.9	140.4	141.4	141.6	141.4	140.7	140.1	140.0	141.0	141.6	141.8	141.0	141.0
Energy commodities	99.1	105.9	98.8	98.4	101.5	108.3	112.5	109.8	107.6	105.3	105.5	106.0	108.2	109.4	109.4
Services less energy	171.3	176.8	174.2	175.0	175.5	175.8	176.0	176.4	177.2	177.7	178.0	178.6	178.9	179.0	179.8
Purchasing power of the consumer dollar:															
1982–84 = $1.00	.668	.649	.659	.657	.654	.651	.649	.649	.648	.647	.645	.643	.642	.641	.640
1967 = $1.00	.224	.218	.221	.221	.219	.219	.218	.218	.218	.217	.216	.216	.215	.215	.215

28. Consumer Price Index: U.S. city average and available local area data: all items

[1982–84 = 100, unless otherwise indicated]

Area[1]	Pricing schedule[2]	All urban consumers							Urban Wage Earners						
		1995	1996					1997	1995	1996					1997
		Dec.	Jan.	Sept.	Oct.	Nov.	Dec.	Jan.	Dec.	Jan.	Sept.	Oct.	Nov.	Dec.	Jan.
U.S. city average	M	153.5	154.4	157.8	158.3	158.6	158.6	159.1	150.9	151.7	155.1	155.5	155.9	155.9	156.3
Region and area size[3]															
Northeast urban	M	160.5	161.4	164.6	165.1	165.4	165.7	166.2	158.0	158.8	162.0	162.4	163.0	163.2	163.5
Size A—More than 1,200,000	M	161.1	162.2	165.4	165.7	166.0	166.2	166.8	157.6	158.5	161.8	162.1	162.6	162.6	163.1
Size B—500,000 to 1,200,000	M	158.6	158.7	162.2	162.4	163.1	164.3	164.2	156.5	156.5	159.8	160.1	160.7	162.0	162.0
Size C—50,000 to 500,000	M	158.6	159.8	162.2	163.8	164.3	164.6	164.7	160.4	161.4	163.7	165.3	166.0	166.3	166.3
North Central urban	M	149.5	150.2	154.0	154.4	155.0	155.3	155.5	146.3	147.0	150.6	151.0	151.7	151.9	152.1
Size A—More than 1,200,000	M	150.3	151.0	154.5	154.8	155.3	155.5	156.0	146.4	147.1	150.4	150.7	151.3	151.5	151.9
Size B—360,000 to 1,200,000	M	148.0	148.6	153.3	154.0	154.5	154.5	154.3	144.5	145.0	149.5	150.2	150.8	150.7	150.5
Size C—50,000 to 360,000	M	151.5	152.2	155.4	156.5	157.1	157.7	157.8	148.9	149.6	152.6	153.7	154.5	155.1	155.2
Size D—Nonmetropolitan (less than 50,000)	M	145.8	146.5	151.0	151.1	151.9	151.9	152.2	144.1	144.7	149.1	149.2	150.1	150.3	150.5
South urban	M	150.3	151.1	154.5	154.9	155.1	155.1	155.7	148.9	149.7	153.1	153.5	153.7	153.7	154.2
Size A—More than 1,200,000	M	149.5	150.4	153.5	153.7	153.8	154.0	154.9	147.8	148.6	151.7	151.9	152.0	152.3	153.1
Size B—450,000 to 1,200,000	M	152.4	153.2	157.3	157.7	158.2	158.2	158.5	148.9	149.6	153.6	153.9	154.5	154.5	154.7
Size C—50,000 to 450,000	M	150.3	151.1	154.4	154.8	154.7	154.4	155.0	150.3	151.1	154.4	154.8	154.7	154.5	154.9
Size D—Nonmetropolitan (less than 50,000)	M	149.1	149.9	153.2	154.3	154.6	154.4	154.8	149.5	150.4	153.9	154.8	155.1	155.0	155.3
West urban	M	154.3	155.3	158.6	159.1	159.2	158.7	159.6	151.3	152.2	155.5	155.9	155.9	155.4	156.3
Size A—More than 1,250,000	M	154.4	155.4	158.7	159.2	159.1	158.7	159.6	150.0	150.9	154.0	154.4	154.3	153.8	154.7
Size C—50,000 to 330,000	M	158.6	159.8	163.0	163.2	163.9	163.9	164.9	155.5	156.6	159.9	160.2	160.8	160.7	161.7
Size classes:															
A (12/86 = 100)	M	138.6	139.5	142.4	142.7	142.9	142.9	143.6	137.7	138.5	141.4	141.7	142.0	141.9	142.5
B	M	153.4	153.9	157.9	158.4	158.9	159.0	159.2	150.7	151.1	155.0	155.4	156.0	156.2	156.3
C	M	153.5	154.4	157.4	158.2	158.5	158.6	159.1	152.7	153.5	156.6	157.4	157.7	157.9	158.2
D	M	150.1	150.9	154.7	155.5	155.8	155.5	155.9	149.4	150.2	154.0	154.7	155.1	154.9	155.3
Selected local areas															
Chicago, IL–Northwestern IN	M	153.8	154.6	158.3	158.8	159.4	159.7	160.4	149.0	149.7	153.2	153.7	154.4	154.6	155.3
Los Angeles–Long Beach, Anaheim, CA	M	154.6	155.7	158.2	158.8	158.4	158.3	159.1	149.4	150.4	152.7	153.2	152.9	152.7	153.6
New York, NY–Northeastern NJ	M	163.7	164.8	168.2	168.2	168.4	168.5	169.1	159.9	160.9	164.4	164.4	164.7	164.7	165.1
Philadelphia, PA–NJ	M	159.1	160.3	164.5	164.9	164.3	164.3	165.1	158.7	159.7	163.7	164.2	164.0	163.6	164.4
San Francisco–Oakland, CA	M	152.1	152.9	156.3	156.9	156.9	156.0	157.0	149.6	150.5	153.8	154.3	154.2	153.1	154.1
Baltimore, MD	1	–	151.6	155.4	–	154.8	–	155.8	–	150.3	154.4	–	153.6	–	154.6
Boston, MA	1	–	162.2	163.5	–	166.3	–	167.7	–	161.1	162.1	–	165.4	–	166.6
Cleveland, OH	1	–	149.0	153.5	–	153.8	–	153.8	–	141.5	145.8	–	146.2	–	146.2
Miami, FL	1	–	152.0	154.6	–	156.4	–	158.1	–	150.0	152.6	–	154.6	–	156.0
St. Louis, MO–IL	1	–	147.2	151.0	–	151.4	–	151.5	–	146.5	150.1	–	150.5	–	150.6
Washington, DC–MD–VA	1	–	156.8	160.8	–	161.2	–	161.6	–	153.9	158.2	–	158.7	–	158.9
Dallas–Ft Worth, TX	2	145.5	–	–	150.7	–	150.0	–	145.4	–	–	150.7	–	150.2	–
Detroit, MI	2	150.3	–	–	153.8	–	154.3	–	145.5	–	–	148.8	–	149.4	–
Houston, TX	2	140.9	–	–	143.2	–	143.6	–	140.5	–	–	142.5	–	143.0	–
Pittsburgh, PA	2	150.0	–	–	154.5	–	155.4	–	143.7	–	–	148.0	–	148.8	–

[1] Area definitions are those established by the Office of Management and Budget in 1983, except for Boston–Lawrence–Salem, MA–NH, Area (excludes Monroe County); and Milwaukee, WI, Area (includes only the Milwaukee MSA). Definitions do not include revisions made since 1983. Excludes farms and the military.

[2] Foods, fuels, and several other items priced every month in all areas; most other goods and services priced as indicated:

M—Every month.

1—January, March, May, July, September, and November.

2—February, Apriul, June, August, October, and December.

[3] Regions are defined as the four Census regions.

– Data not available.

NOTE: Local area CPI indexes are byproducts of the national CPI program. Because each local index is a small subset of the national index, it has a smaller sample size and is, therefore, subject to substantially more sampling and other measurement error than the national index. As a result, local area indexes show greater volatility than the national index, although their long-term trends are quite similar. Therefore, the Bureau of Labor Statistics strongly urges users to consider adopting the national average CPI for use in escalator clauses.

29. Annual data: Consumer Price Index, U.S. city average, all items and major groups

[1982–84 = 100]

Series	1988	1989	1990	1991	1992	1993	1994	1995	1996
Consumer Price Index for All Urban Consumers:									
All items:									
Index	118.3	124.0	130.7	136.2	140.3	144.5	148.2	152.4	156.9
Percent change	4.1	4.8	5.4	4.2	3.0	3.0	2.6	2.8	3.0
Food and beverages:									
Index	118.2	124.9	132.1	136.8	138.7	141.6	144.9	148.9	153.7
Percent change	4.1	5.7	5.8	3.6	1.4	2.1	2.3	2.8	3.2
Housing:									
Index	118.5	123.0	128.5	133.6	137.5	141.2	144.8	148.5	152.8
Percent change	3.8	3.8	4.5	4.0	2.9	2.7	2.5	2.6	2.9
Apparel and upkeep:									
Index	115.4	118.6	124.1	128.7	131.9	133.7	133.4	132.0	131.7
Percent change	4.3	2.8	4.6	3.7	2.5	1.4	–.2	–1.0	-.2
Transportation:									
Index	108.7	114.1	120.5	123.8	126.5	130.4	134.3	139.1	143.0
Percent change	3.1	5.0	5.6	2.7	2.2	3.1	3.0	3.6	2.8
Medical care:									
Index	138.6	149.3	162.8	177.0	190.1	201.4	211.0	220.5	228.2
Percent change	6.5	7.7	9.0	8.7	7.4	5.9	4.8	4.5	3.5
Entertainment:									
Index	120.3	126.5	132.4	138.4	142.3	145.8	150.1	153.9	159.1
Percent change	4.3	5.2	4.7	4.5	2.8	2.5	2.9	2.5	3.4
Other goods and services:									
Index	137.0	147.7	159.0	171.6	183.3	192.9	198.5	206.9	215.4
Percent change	6.6	7.8	7.7	7.9	6.8	5.2	2.9	4.2	4.1
Consumer Price Index for Urban Wage Earners and Clerical Workers:									
All items:									
Index	117.0	122.6	129.0	134.3	138.2	142.1	145.6	149.8	154.1
Percent change	4.0	4.8	5.2	4.1	2.9	2.8	2.5	2.9	2.9

30. Producer Price Indexes, by stage of processing

[1982 = 100]

Grouping	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Finished goods	127.9	131.3	129.4	129.4	130.1	130.6	131.1	131.7	131.5	131.9	131.8	132.7	132.5	132.7	132.6
Finished consumer goods	125.6	129.5	127.1	127.0	128.0	128.7	129.3	130.0	129.9	130.4	130.4	131.2	131.0	131.2	131.1
Finished consumer foods	129.0	133.5	130.7	130.7	132.0	131.2	131.5	133.6	133.9	135.3	135.6	136.6	135.9	135.5	134.0
Finished consumer goods excluding foods	124.0	127.6	125.4	125.3	126.1	127.4	128.2	128.3	128.0	128.1	128.0	128.8	128.7	129.2	129.6
Nondurable goods less food	118.8	123.2	120.1	119.9	121.2	123.1	124.1	124.2	124.0	124.2	124.6	124.5	124.5	125.1	125.8
Durable goods	132.7	134.2	134.2	134.3	134.3	134.0	134.2	134.4	133.8	133.7	132.4	135 2	135.1	135.0	135.0
Capital equipment	136.7	138.3	138.3	138.4	138.3	138.3	138.2	138.2	138.1	138.2	137.3	138.9	138.7	138.8	139.0
Intermediate materials, supplies, and components	124.9	125.7	125.2	124.7	124.9	125.4	126.2	126.2	125.9	126.1	126.7	126.0	125.9	126.1	126.4
Materials and components for manufacturing	130.4	128.6	129.5	129.0	128.6	128.3	128.8	128.8	128.3	128.3	128.6	128.3	128.3	128.5	128.6
Materials for food manufacturing	119.5	125.7	120.7	121.0	120.6	121.6	126.6	128.2	128.5	129.4	129.2	129.2	127.0	126.6	125.2
Materials for nondurable manufacturing	135.1	130.5	133.3	132.4	131.5	130.5	130.2	129.9	129.4	129.5	130.0	129.6	129.9	130.0	130.2
Materials for durable manufacturing	135.6	131.4	132.2	131.0	131.1	131.2	132.5	132.6	130.7	130.6	131.2	130.5	131.0	131.6	132.0
Components for manufacturing	126.5	126.8	127.3	127.4	127.2	126.9	126.8	126.6	126.7	126.8	126.8	126.6	126.6	126.6	126.8
Materials and components for construction	142.1	143.5	141.9	142.0	142.2	142.5	143.5	144.0	143.7	144.1	144.8	144.3	144.8	144.8	145.0
Processed fuels and lubricants	84.2	89.9	85.2	84.0	85.8	89.3	91.4	91.3	91.1	91.9	93.6	92.3	91.6	92.5	93.5
Containers	148.8	141.2	148.2	146.1	144.6	143.0	141.6	140.1	139.6	138.4	138.5	137.9	138.2	138.3	137.9
Supplies	132.1	135.9	135.3	135.3	135.4	135.7	136.2	136.1	136.4	136.4	136.8	135.9	135.5	135.5	135.6
Crude materials for further processing	102.7	113.5	108.8	111.1	110.0	114.4	115.9	113.3	115.6	116.0	112.9	111.3	113.6	118.9	125.2
Foodstuffs and feedstuffs	105.8	121.5	114.7	115.0	116.2	119.6	127.7	129.0	130.9	129.5	124.9	119.6	117.9	113.7	112.4
Crude nonfood materials	96.8	104.0	100.8	104.4	102.0	106.7	103.8	98.7	101.2	102.8	100.8	101.8	106.6	118.0	129.1
Special groupings:															
Finished goods, excluding foods	127.5	130.5	129.0	128.9	129.5	130.4	130.9	131.0	130.8	130.9	130.5	131.5	131.4	131.8	132.1
Finished energy goods	78.1	83.1	78.5	77.8	80.1	83.3	84.6	84.7	84.2	84.6	85.3	84.8	84.9	85.9	86.7
Finished goods less energy	136.9	139.6	138.6	138.8	139.1	138.8	139.0	139.7	139.6	140.0	139.6	141.0	140.7	140.6	140.3
Finished consumer goods less energy	136.9	140.1	138.7	138.9	139.3	138.9	139.3	140.2	140.2	140.7	140.5	141.8	141.4	141.3	140.8
Finished goods less food and energy	140.0	142.0	141.8	141.9	141.8	141.7	142.0	142.0	141.9	141.9	141.1	142.7	142.5	142.6	142.7
Finished consumer goods less food and energy	141.9	144.3	143.9	144.1	144.0	143.8	144.3	144.4	144.3	144.2	143.5	145.0	144.9	144.9	145.1
Consumer nondurable goods less food and energy	148.5	151.4	150.6	151.0	150.8	150.8	151.5	151.6	151.8	151.6	151.5	152.0	151.8	151.9	152.3
Intermediate materials less foods and feeds	125.5	125.6	125.4	124.8	125.0	125.4	126.0	125.9	125.6	125.7	126.3	125.8	125.8	126.1	126.4
Intermediate foods and feeds	114.8	128.4	123.0	123.0	123.4	125.3	130.3	131.2	131.9	132.7	133.5	130.7	127.7	127.6	126.3
Intermediate energy goods	84.1	89.7	85.0	83.8	85.7	89.1	91.2	91.1	90.9	91.7	93.3	92.1	91.4	92.1	93.3
Intermediate goods less energy	134.0	133.6	134.1	133.7	133.5	133.3	133.8	133.8	133.5	133.6	133.9	133.5	133.4	133.6	133.6
Intermediate materials less foods and energy	135.2	134.0	134.8	134.4	134.1	133.9	134.1	134.0	133.6	133.6	133.9	133.6	133.8	133.9	134.1
Crude energy materials	69.4	84.4	78.1	82.7	80.6	87.3	83.3	77.6	81.8	83.8	81.0	82.7	89.1	103.8	117.2
Crude materials less energy	123.5	130.0	126.8	127.1	127.1	129.1	135.0	135.2	135.8	134.8	131.7	127.6	126.2	123.4	123.5
Crude nonfood materials less energy	173.6	155.8	162.1	162.3	159.2	157.6	158.1	155.3	152.4	152.9	153.5	152.3	151.6	152.4	156.1

Producer Price Indexes for the net output of major industry groups

cember 1984 = 100, unless otherwise indicated]

Industry	Annual average		1996												1997
	1995	1996	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Total mining industries	71.0	83.8	79.1	83.4	80.9	86.0	82.9	78.1	81.0	82.6	81.3	83.0	88.4	99.7	109.8
Metal mining	101.4	92.2	98.2	97.5	96.7	96.4	97.1	93.3	89.2	87.5	86.8	86.6	88.1	88.3	88.1
Coal mining (12/85 = 100)	91.6	91.6	89.9	91.9	92.2	91.1	93.1	91.7	90.5	92.6	90.9	90.5	91.5	91.1	92.8
Oil and gas extraction (12/85 = 100)	66.6	83.9	78.0	82.6	79.2	86.2	81.8	75.9	80.7	82.7	81.3	83.7	90.6	106.0	119.2
Mining and quarrying of nonmetallic minerals, except fuels	123.8	127.0	125.9	126.4	126.7	127.1	127.6	128.1	127.2	127.2	127.5	127.3	127.2	127.1	124.4
Total manufacturing industries	124.2	127.1	125.8	125.7	126.0	126.8	127.4	127.1	127.1	127.4	127.5	128.2	128.0	128.1	128.2
Food and kindred products	121.7	127.2	124.2	124.4	124.3	124.6	126.3	127.6	128.3	129.7	129.7	129.8	128.7	128.4	127.6
Tobacco manufactures	193.2	199.1	195.1	195.0	195.1	195.1	201.1	201.0	201.1	201.4	201.0	201.1	201.1	201.4	201.5
Textile mill products	116.5	118.2	117.4	117.5	117.7	118.1	118.3	118.0	118.3	118.4	118.5	118.6	118.4	118.5	118.5
Apparel and other finished products made from fabrics and similar materials	120.6	122.3	121.4	121.6	121.6	121.5	122.2	122.5	122.6	122.5	123.0	123.1	123.1	123.1	123.0
Lumber and wood products, except furniture	154.1	153.6	150.6	150.7	150.9	151.0	153.8	154.5	153.3	154.4	156.6	154.6	156.2	155.7	156.5
Furniture and fixtures	133.3	136.1	135.2	135.7	135.6	135.8	135.7	135.9	136.2	136.1	136.4	137.1	137.0	137.0	137.4
Paper and allied products	146.7	138.7	147.8	146.1	143.0	140.5	138.2	137.2	136.3	135.3	165.1	134.9	134.7	134.8	134.5
Printing, publishing, and allied industries	159.0	165.4	164.5	164.8	164.8	165.1	165.3	165.4	165.2	165.5	166.1	166.4	166.0	166.4	167.9
Chemicals and allied products	143.4	145.9	144.6	144.5	145.0	145.3	146.0	146.0	145.9	146.1	146.7	146.8	146.8	147.0	147.2
Petroleum refining and related products	77.2	87.4	79.4	77.3	81.8	90.5	92.8	87.3	86.3	86.9	89.9	92.0	92.4	92.9	92.7
Rubber and miscellaneous plastics products	123.3	123.1	123.0	122.9	122.8	122.6	123.0	123.0	123.2	123.4	123.5	123.1	123.3	123.0	122.9
Leather and leather products	134.1	134.5	134.6	134.6	134.8	134.1	134.5	134.4	134.1	134.2	135.3	135.1	135.1	135.2	136.7
Stone, clay, glass, and concrete products	124.3	125.8	125.1	125.3	125.3	125.4	125.5	125.5	125.8	125.9	126.3	126.2	126.7	126.8	127.0
Primary metal industries	128.2	123.8	125.7	124.4	124.2	124.1	124.6	124.6	123.2	122.8	122.7	122.7	122.8	123.2	123.5
Fabricated metal products, except machinery and transportation transportation equipment	124.8	126.2	125.9	125.7	125.9	126.0	126.0	126.2	126.2	126.4	126.4	126.5	126.5	126.6	126.8
Machinery, except electrical	119.0	119.2	119.7	119.7	119.7	119.3	119.3	119.1	119.1	119.1	119.1	118.9	118.9	118.9	119.2
Electrical and electronic machinery, equipment, and supplies	113.3	113.2	113.8	113.9	113.5	113.3	113.1	113.0	113.0	113.1	113.0	112.7	113.1	112.5	112.6
Transportation	132.2	134.2	134.2	134.2	134.3	134.1	134.1	134.3	133.8	133.8	132.1	135.4	135.3	135.3	135.4
Measuring and controlling instruments; photographic, medical, and optical goods; watches and clocks	124.0	125.0	125.1	125.3	125.2	125.1	125.1	124.9	125.2	125.0	125.0	125.1	124.2	125.0	125.4
Miscellaneous manufacturing industries (12/85 = 100)	125.9	127.8	127.3	127.6	127.4	127.4	127.6	127.7	127.9	128.0	128.1	128.3	128.3	128.3	128.9
Service industries:															
Motor freight transportation and warehousing (06/93 = 100)	104.5	106.4	105.1	105.9	105.8	105.9	106.0	106.9	106.2	106.4	106.6	106.9	107.6	107.3	108.5
U.S. Postal Service (06/89 = 100)	132.2	132.3	132.3	132.3	132.3	132.3	132.3	132.3	132.3	132.3	132.3	132.3	132.3	132.3	132.3
Water transportation (12/92 = 100)	103.0	103.6	103.9	103.8	104.2	103.8	103.0	102.9	103.0	103.0	103.8	104.6	104.2	104.1	104.8
Transportation by air (12/92 = 100)	113.7	121.0	117.2	119.1	119.9	120.2	120.8	121.4	122.5	121.8	121.9	122.4	122.8	122.2	128.5
Pipelines, except natural gas (12/92 = 100)	110.8	105.6	110.6	110.6	110.6	103.7	103.7	103.7	104.0	104.0	101.0	100.9	103.9	103.9	98.8

32. Annual data: Producer Price Indexes, by stage of processing

[1982 = 100]

Index	1988	1989	1990	1991	1992	1993	1994	1995	1996
Finished goods									
Total	108.0	113.6	119.2	121.7	123.2	124.7	125.5	127.9	131.3
Foods	112.6	118.7	124.4	124.1	123.3	125.7	126.8	129.0	133.5
Energy	59.8	65.7	75.0	78.1	77.8	78.0	77.0	78.1	83.1
Other	117.0	122.1	126.6	131.1	134.2	135.8	137.1	140.0	142.0
Intermediate materials, supplies, and components									
Total	107.1	112.0	114.5	114.4	114.7	116.2	118.5	124.9	125.7
Foods	106.0	112.7	117.9	115.3	113.9	115.6	118.5	119.5	125.7
Energy	70.9	76.1	85.5	85.1	84.3	84.6	83.0	84.1	89.7
Other	115.2	120.2	120.9	121.4	122.0	123.8	127.1	135.2	134.0
Crude materials for further processing									
Total	96.0	103.1	108.9	101.2	100.4	102.4	101.8	102.7	113.5
Foods	106.1	111.2	113.1	105.5	105.1	108.4	106.5	105.8	121.5
Energy	67.7	75.9	85.9	80.4	78.8	76.7	72.1	69.4	84.4
Other	85.9	95.8	107.3	97.5	94.2	94.1	97.0	105.8	105.7

33. U.S. export price indexes by Standard International Trade Classification

[1995 = 100, unless otherwise indicated]

SITC Rev. 3	Industry	1996												1997
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
0	**Food and live animals**	111.9	112.3	114.5	120.3	124.6	122.0	119.6	118.7	107.3	105.6	103.2	101.9	100.7
01	Meat and meat preparations	101.3	98.2	98.1	99.9	98.4	101.6	98.8	100.9	98.5	98.9	98.3	97.8	95.5
04	Cereals and cereal preparations	124.7	127.4	131.0	144.6	153.2	145.6	140.2	136.7	109.3	104.6	101.5	100.5	98.8
05	Vegetables, fruit, and nuts, prepared fresh or dry	101.0	99.7	103.1	104.0	103.7	105.7	105.3	105.6	106.8	109.0	106.2	101.0	101.5
2	**Crude materials, inedible, except fuels**	97.1	94.2	91.0	90.5	90.1	90.3	89.3	89.7	90.8	89.5	88.7	88.8	90.0
21	Hides, skins, and furskins, raw	90.4	90.9	91.1	90.1	92.1	95.7	95.8	105.1	109.4	117.5	116.4	113.8	113.5
22	Oilseeds and oleaginous fruits	121.8	120.3	119.5	127.8	129.0	127.0	160.5	132.4	131.7	113.9	115.6	114.9	120.2
24	Cork and wood	98.1	98.9	98.1	96.4	94.9	94.7	94.0	94.6	96.3	96.7	97.1	97.6	97.9
25	Pulp and waste paper	87.3	73.8	59.5	52.7	52.0	56.7	58.4	57.4	58.1	58.9	58.0	56.0	55.9
26	Textile fibers and their waste	96.6	94.7	92.4	93.4	93.5	91.1	85.9	84.8	86.7	85.5	82.6	83.5	83.3
27	Crude fertilizers and crude minerals	100.1	99.1	98.8	98.8	98.6	96.8	97.0	96.8	96.6	97.0	97.2	97.2	97.8
28	Metalliferous ores and metal scrap	91.2	90.8	90.5	91.0	90.7	89.3	84.8	84.4	85.6	86.5	84.0	85.7	86.8
3	**Mineral fuels, lubricants, and related products**	107.0	105.3	106.9	110.9	110.7	109.1	108.9	109.1	112.5	116.4	115.7	116.7	116.5
32	Coal, coke, and briquettes	103.0	102.4	102.6	102.7	102.9	103.1	102.5	101.6	101.5	101.5	101.7	101.8	102.5
33	Petroleum, petroleum products, and related materials	111.0	108.4	111.4	118.8	117.2	113.7	113.5	114.6	121.0	128.1	126.5	128.4	127.2
4	**Animal and vegetable oils, fats, and waxes**	95.9	90.9	89.3	91.1	97.2	95.4	93.8	96.3	101.7	97.3	90.0	93.0	96.1
5	**Chemicals and related products, n.e.s.**	96.7	96.9	97.0	97.2	97.4	97.1	97.3	96.5	96.3	96.4	95.9	96.1	96.1
54	Medicinal and pharmaceutical products	101.0	101.0	102.1	101.7	101.8	101.8	101.7	101.8	101.9	101.7	101.8	101.8	100.9
55	Essential oils; polishing and cleaning preparations	100.8	100.1	99.9	100.8	100.5	100.8	100.7	101.0	101.7	101.7	101.5	101.5	101.3
57	Plastics in primary forms (12/92 = 100)	90.5	90.5	91.4	94.0	95.5	95.5	96.3	96.5	96.1	95.6	93.1	93.8	94.8
58	Plastics in nonprimary forms (12/92 = 100)	101.3	101.1	100.6	99.3	99.1	99.9	100.5	99.3	98.0	97.7	97.3	97.4	99.1
59	Chemical materials and products, n.e.s.	100.7	101.6	100.9	101.8	101.8	102.0	103.0	102.9	102.8	103.0	103.1	103.1	103.0
6	**Manufactured goods classified chiefly by materials**	99.9	99.1	98.7	98.3	98.5	97.9	97.2	96.8	97.1	96.7	96.6	97.0	97.2
62	Rubber manufactures, n.e.s.	102.9	103.3	102.2	102.4	102.5	102.8	102.7	102.4	102.7	102.8	102.9	103.0	103.0
64	Paper, paperboard, and articles of paper, pulp, and paperboard	95.6	93.1	92.6	90.4	89.5	87.3	87.3	86.9	87.5	85.9	85.6	84.9	83.7
66	Nonmetallic mineral manufactures, n.e.s.	101.6	102.5	102.0	101.1	102.0	101.2	101.8	102.7	102.2	103.2	104.2	103.9	104.1
68	Nonferrous metals	96.6	94.8	93.0	94.0	94.8	93.4	90.3	87.6	88.7	87.2	85.2	88.3	89.9
7	**Machinery and transport equipment**	100.6	100.8	100.6	100.7	100.6	100.9	100.6	100.5	100.5	100.5	100.5	100.5	100.7
71	Power generating machinery and equipment	102.3	103.0	103.2	103.4	103.6	104.3	104.1	104.2	104.3	104.1	104.2	104.6	105.1
72	Machinery specialized for particular industries	102.3	101.9	102.0	103.1	103.0	102.7	102.9	103.0	103.1	103.1	102.8	102.9	103.7
74	General industrial machines and parts, n.e.s., and machine parts	101.3	101.7	101.7	101.9	101.9	102.5	102.6	102.7	102.7	103.0	103.3	103.1	103.5
75	Computer equipment and office machines	96.0	95.7	95.4	94.4	93.8	93.7	92.2	91.5	90.4	89.9	89.2	88.2	87.9
76	Telecommunications and sound recording and reproducing apparatus and equipment	99.4	99.4	101.1	101.3	100.7	101.1	101.0	100.2	100.2	100.3	100.4	100.4	100.7
77	Electrical machinery and equipment	100.2	100.5	99.8	100.0	99.8	99.1	98.1	97.9	97.9	97.5	97.4	97.5	97.4
78	Road vehicles	100.8	100.8	100.9	100.8	100.9	101.0	100.9	101.0	101.0	101.2	101.4	101.4	101.6
87	**Professional, scientific, and controlling instruments and apparatus**	100.7	101.1	101.2	101.0	101.0	101.6	101.5	102.0	101.9	101.9	102.2	102.7	103.4

34. U.S. import price indexes by Standard International Trade Classification

[1995 = 100, unless otherwise indicated]

SITC Rev. 3	Industry	1996												1997
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
0	**Food and live animals**	92.5	96.6	95.2	99.1	98.9	94.7	94.1	93.9	96.6	97.4	96.5	94.6	94.6
01	Meat and meat preparations	96.1	93.8	92.1	91.7	91.4	90.4	91.0	100.2	100.8	102.6	102.3	98.9	97.6
03	Fish and crustaceans, mollusks, and other aquatic invertebrates	94.4	95.0	95.4	96.0	96.2	97.5	95.6	96.5	97.0	97.0	97.1	98.3	98.7
05	Vegetables, fruit, and nuts, prepared fresh or dry	92.6	104.9	101.8	113.9	110.6	98.3	99.7	98.4	106.5	109.8	106.8	101.8	101.5
07	Coffee, tea, cocoa, spices, and manufactures thereof	82.5	86.6	83.9	87.0	88.5	83.5	81.7	77.0	78.9	77.4	77.2	75.0	77.7
1	**Beverages and tobacco**	101.9	102.1	102.6	103.3	103.5	103.6	104.1	104.4	104.9	104.9	105.0	105.2	105.6
11	Beverages	101.0	101.1	100.9	101.4	101.3	101.4	101.5	102.0	102.4	102.5	102.6	102.9	102.9
2	**Crude materials, inedible, except fuels**	100.7	99.6	96.4	95.5	93.7	94.3	92.8	93.7	97.0	95.4	96.4	96.3	97.1
23	Crude rubber (including synthetic and reclaimed)	100.9	95.7	100.2	93.3	90.6	90.7	88.8	85.5	85.6	83.5	85.5	88.2	88.2
24	Cork and wood	97.7	100.5	99.2	102.9	107.9	113.6	111.3	120.6	126.0	118.8	125.7	120.6	121.4
25	Pulp and waste paper	101.9	93.2	78.6	72.7	59.7	62.1	66.1	64.5	66.6	67.7	67.8	66.2	65.7
28	Metalliferous ores and metal scrap	102.3	101.4	101.9	102.1	100.9	101.7	95.8	95.2	97.4	97.2	95.9	97.5	99.6
29	Crude animal and vegetable materials, n.e.s.	–	–	–	–	–	–	–	–	–	–	–	100.0	105.7
3	**Mineral fuels, lubricants, and related products**	105.3	103.9	112.5	121.7	117.2	110.6	112.5	115.1	123.4	131.8	131.8	135.3	139.8
33	Petroleum, petroleum products, and related materials	105.5	103.9	112.8	122.6	118.0	111.0	113.1	115.6	124.3	132.9	131.6	133.9	136.0
34	Gas, natural and manufactured	105.4	105.2	112.3	114.2	111.0	108.2	107.7	111.6	115.7	123.5	136.5	155.6	180.6
5	**Chemicals and related products, n.e.s.**	112.1	112.1	112.0	111.3	111.3	110.2	110.2	110.2	110.5	110.5	110.7	110.5	112.1
52	Inorganic chemicals	100.9	101.4	101.9	101.3	101.2	99.8	100.4	100.3	100.4	103.4	102.1	103.5	103.9
53	Dying, tanning, and coloring materials	102.2	103.4	103.2	103.1	102.7	102.1	101.7	102.2	102.6	101.3	100.6	100.4	99.4
54	Medicinal and pharmaceutical products	101.9	101.3	100.7	100.8	100.0	99.7	99.4	99.9	101.3	100.1	99.9	99.0	97.8
55	Essential oils; polishing and cleaning preparations	106.8	105.0	103.8	104.1	102.5	100.3	100.7	101.3	100.2	101.3	100.7	100.1	99.4
57	Plastics in primary forms (12/92 = 100)	102.7	103.1	102.5	104.0	102.7	97.2	95.9	92.3	93.5	93.4	95.7	95.0	94.5
58	Plastics in nonprimary forms (12/92 = 100)	92.7	89.3	88.8	86.0	86.0	87.1	86.5	88.0	86.7	87.2	86.0	86.6	85.6
59	Chemical materials and products, n.e.s.	105.9	106.8	107.9	107.7	107.8	107.6	106.7	106.2	108.0	107.6	107.3	105.8	105.5
6	**Manufactured goods classified chiefly by materials**	101.0	100.7	100.5	100.0	99.3	99.2	98.1	97.4	97.0	96.0	95.4	95.5	95.2
62	Rubber manufactures, n.e.s.	100.8	100.9	100.1	100.1	100.4	100.2	99.6	99.5	99.6	99.3	98.6	98.5	98.4
64	Paper, paperboard, and articles of paper, pulp, and paperboard	108.0	107.8	106.5	104.6	101.7	100.9	98.6	96.4	93.1	89.5	87.5	86.2	84.2
66	Nonmetallic mineral manufactures, n.e.s.	100.8	100.7	101.6	101.9	101.7	101.5	101.5	101.7	102.3	102.2	102.7	103.0	103.5
68	Nonferrous metals	96.3	95.3	95.1	94.3	93.6	93.8	89.5	87.0	86.7	85.0	83.8	84.6	86.3
69	Manufactures of metals, n.e.s.	101.3	101.8	101.3	101.5	100.6	100.4	100.9	101.2	101.1	100.9	100.8	101.2	100.4
7	**Machinery and transport equipment**	100.1	99.9	99.5	99.2	98.9	98.6	98.5	98.3	98.6	98.4	98.1	98.1	97.1
72	Machinery specialized for particular industries	101.4	101.8	102.7	101.6	101.3	101.1	100.8	101.0	101.3	101.2	101.0	101.5	101.0
74	General industrial machines and parts, n.e.s., and machine parts	101.7	101.2	101.0	100.7	100.6	100.5	100.7	100.7	101.4	101.2	100.7	100.7	100.5
75	Computer equipment and office machines	97.8	97.1	95.2	94.3	92.9	91.7	91.4	90.7	89.9	89.4	88.7	88.2	86.4
76	Telecommunications and sound recording and reproducing apparatus and equipment	99.1	98.7	98.3	98.2	97.5	97.3	97.0	96.6	96.5	96.3	96.0	95.8	94.8
77	Electrical machinery and equipment	98.7	98.2	97.6	96.9	96.2	95.5	95.0	94.1	94.9	94.2	93.3	92.6	90.5
78	Road vehicles	100.6	100.7	100.5	100.6	100.6	100.4	100.6	100.7	101.0	100.9	100.7	100.8	100.7
85	Footwear	101.0	101.0	101.4	101.4	101.3	101.3	100.4	100.9	101.0	100.8	100.7	100.9	101.3
88	Photographic apparatus, equipment, and supplies, and optical goods, n.e.s.	100.2	99.7	99.4	98.8	98.2	97.4	97.1	97.5	97.8	97.6	97.1	96.9	96.1

35. U.S. export price indexes by end-use category

[1995 = 100]

Category	1996												1997
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
ALL COMMODITIES	101.0	100.8	100.6	101.2	101.6	101.4	100.9	100.7	99.9	99.7	99.3	99.3	99.5
Foods, feeds, and beverages	112.1	112.2	113.9	119.9	124.0	121.6	119.7	119.2	109.2	105.9	103.9	102.7	102.4
Agricultural foods, feeds, and beverages	114.5	114.6	116.8	123.8	128.3	125.2	122.8	122.0	110.9	107.2	104.7	103.4	103.1
Nonagricultural (fish, beverages) food products	92.0	91.8	89.7	87.4	88.2	91.2	94.2	95.8	94.4	95.2	97.5	97.4	96.2
Industrial supplies and materials	97.8	96.7	95.8	95.6	95.7	95.3	94.8	94.5	95.1	95.3	94.8	95.0	95.2
Agricultural industrial supplies and materials	97.1	95.5	94.3	94.0	94.7	93.8	91.9	93.5	95.1	95.7	93.3	93.9	95.9
Fuels and lubricants	105.9	105.4	106.7	110.1	110.1	109.1	108.7	109.0	111.3	114.0	114.2	115.2	115.6
Nonagricultural supplies and materials, excluding fuel and building materials	96.7	95.4	94.1	93.6	93.6	93.5	93.1	92.2	92.4	92.2	91.7	91.8	91.7
Selected building materials	97.7	97.9	97.4	96.1	95.7	95.1	94.8	95.6	96.7	97.1	97.7	97.9	98.2
Capital goods	100.6	100.8	100.7	100.8	100.7	101.0	100.7	100.6	100.6	100.5	100.4	100.5	100.7
Electric and electrical generating equipment	100.7	100.7	100.7	100.7	100.8	100.8	100.9	100.7	100.7	100.6	100.5	100.6	100.6
Nonelectrical machinery	100.1	100.2	100.2	100.3	100.1	99.9	99.3	99.2	99.0	98.9	98.8	98.7	98.9
Automotive vehicles, parts, and engines	101.0	101.0	100.9	100.9	101.1	101.1	101.0	101.2	101.1	101.3	101.5	101.5	101.7
Consumer goods, excluding automotive	100.7	101.0	101.1	101.4	101.1	101.3	101.3	101.4	101.6	101.6	101.6	101.8	101.9
Nondurables, manufactured	101.0	100.9	101.1	101.2	101.3	101.4	101.4	101.4	101.5	101.5	101.4	101.6	101.6
Durables, manufactured	107.7	108.1	108.1	108.4	107.7	108.2	108.4	108.6	108.9	108.7	108.7	108.7	107.5
Agricultural commodities	126.1	125.8	127.5	133.6	137.8	134.8	132.2	131.9	122.4	119.2	116.4	115.4	124.0
Nonagricultural commodities	108.1	107.8	107.5	107.5	107.4	107.5	107.3	107.1	107.3	107.3	107.3	107.4	107.8

36. U.S. import price indexes by end-use category

[1995 = 100]

Category	1996												1997
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
ALL COMMODITIES	100.6	100.4	101.0	101.9	101.2	100.1	100.0	100.1	101.3	101.8	101.6	101.7	101.4
Foods, feeds, and beverages	95.9	98.7	97.4	100.5	101.1	98.4	97.2	96.4	98.2	98.4	98.6	97.4	97.1
Agricultural foods, feeds, and beverages	98.7	99.5	97.5	101.7	102.5	98.3	97.1	95.6	98.1	98.3	98.6	96.6	96.4
Nonagricultural (fish, beverages) food products	96.2	96.7	97.0	97.6	97.8	98.7	97.2	98.1	98.4	98.5	98.6	99.6	99.1
Industrial supplies and materials	102.1	101.2	104.3	107.2	105.0	102.5	102.6	103.4	106.5	109.0	108.8	109.2	110.5
Fuels and lubricants	105.6	104.2	113.0	112.2	117.8	111.1	113.0	115.6	123.5	131.7	131.6	133.0	137.4
Petroleum and petroleum products	105.5	104.0	112.9	122.5	118.0	111.1	113.2	115.7	124.4	133.2	132.1	132.3	134.0
Paper and paper base stocks	106.8	104.5	99.7	96.8	91.3	91.0	90.3	88.1	86.3	83.8	82.4	80.9	79.8
Materials associated with nondurable supplies and materials	99.0	98.5	99.7	98.5	98.4	97.7	97.7	97.7	97.4	97.6	97.6	97.4	96.9
Selected building materials	98.5	99.6	99.2	101.0	103.7	107.1	106.0	109.8	114.0	109.9	112.1	110.3	110.8
Unfinished metals associated with durable goods	98.0	97.5	97.4	96.9	96.2	96.4	93.7	92.5	93.3	92.6	91.8	92.4	93.0
Nonmetals associated with durable goods	101.4	101.0	101.5	100.9	101.0	98.7	97.8	97.5	97.8	97.8	97.8	98.3	98.1
Capital goods	99.8	99.5	98.9	98.3	97.8	97.3	97.1	96.8	97.0	96.7	96.3	96.1	94.4
Electric and electrical generating equipment	101.2	100.7	100.4	100.1	99.7	99.3	99.2	99.1	99.1	99.3	99.0	99.0	99.0
Nonelectrical machinery	99.4	99.0	98.4	97.7	97.0	96.5	96.2	95.7	96.0	95.5	94.8	94.5	92.6
Automotive vehicles, parts, and engines	100.6	100.7	100.6	100.6	100.5	100.4	100.5	100.6	100.9	100.7	100.6	100.8	100.7
Consumer goods, excluding automotive	100.8	100.7	100.5	100.5	100.6	100.3	100.2	100.2	100.4	100.2	100.1	100.1	100.0
Nondurables, manufactured	100.8	100.7	100.7	100.8	101.0	100.9	100.6	100.7	100.9	100.7	100.7	100.6	100.6
Durables, manufactured	100.5	100.4	100.4	100.3	100.1	100.0	99.9	99.9	99.9	99.8	99.6	99.6	99.3
Nonmanufactured consumer goods	102.1	103.6	100.5	100.6	100.6	98.1	98.5	98.2	99.4	99.8	99.4	101.0	101.5

37. U.S. international price indexes for selected categories of services

[1990 = 100]

Category	1994	1995				1996			
	Dec.	Mar.	June	Sept	Dec.	Mar.	June	Sept.	Dec.
Air freight (inbound)	110.4	115.3	118.2	112.6	113.3	110.1	109.2	109.8	109.0
Air freight (outbound)	97.3	98.4	98.4	98.9	98.1	97.6	97.9	97.4	97.7
Air passenger fares (U.S. carriers)	113.8	116.1	128.6	126.5	117.4	120.0	127.4	131.1	124.1
Air passenger fares (foreign carriers)	110.0	113.8	125.2	121.4	115.3	114.5	122.5	125.5	–
Ocean liner freight (inbound)	106.6	108.5	112.2	113.5	113.1	113.5	111.3	109.5	110.0

38. Indexes of productivity, hourly compensation, and unit costs, quarterly data seasonally adjusted

[1992 = 100]

Item	Quarterly indexes											
	1994				1995				1996			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Business												
Output per hour of all persons	100.5	100.6	101.1	101.1	100.4	100.8	101.2	101.0	101.5	101.8	101.9	102.5
Compensation per hour	104.0	104.2	104.7	105.5	106.2	107.3	108.3	109.4	110.3	111.4	112.5	113.5
Real compensation per hour	99.5	99.0	98.6	98.8	98.8	98.9	99.3	99.8	99.8	99.9	100.2	100.3
Unit labor costs	103.6	103.6	103.6	104.4	105.8	106.5	107.0	108.3	108.6	109.4	110.4	110.7
Unit nonlabor payments	104.5	105.7	107.6	107.8	107.4	107.8	108.3	106.7	107.4	107.7	107.0	107.2
Implicit price deflator	103.9	104.4	105.1	105.6	106.4	106.9	107.5	107.8	108.2	108.8	109.2	109.5
Nonfarm business												
Output per hour of all persons	100.3	100.6	101.0	101.1	100.5	100.9	101.3	101.1	101.5	101.7	101.7	102.2
Compensation per hour	103.8	104.1	104.5	105.4	106.2	107.2	108.2	109.3	110.2	111.3	112.2	113.2
Real compensation per hour	99.2	98.9	98.4	98.7	98.7	98.8	99.2	99.6	99.7	99.7	99.9	100.0
Unit labor costs	103.4	103.5	103.5	104.2	105.6	106.3	106.8	108.1	108.5	109.4	110.3	110.7
Unit nonlabor payments	104.8	106.3	108.4	108.4	108.2	108.5	108.9	107.1	107.4	107.3	106.7	106.9
Implicit price deflator	103.9	104.5	105.3	105.7	106.5	107.1	107.5	107.8	108.1	108.7	109.0	109.4
Nonfinancial corporations												
Output per hour of all employees	102.7	102.6	102.4	102.7	101.8	102.4	103.7	104.3	104.6	105.0	106.0	–
Compensation per hour	103.8	103.8	104.1	104.7	105.3	106.3	107.3	108.3	109.0	110.1	111.2	–
Real compensation per hour	99.2	98.6	98.0	98.0	97.9	98.0	98.4	98.8	98.6	98.7	99.1	–
Total unit costs	101.3	100.5	101.0	100.9	102.5	103.0	102.5	102.8	102.9	103.1	103.0	–
Unit labor costs	101.0	101.2	101.6	101.9	103.4	103.8	103.5	103.9	104.3	104.9	104.9	–
Unit nonlabor costs	102.1	98.7	99.3	98.3	100.0	100.9	99.7	100.0	99.3	98.4	98.1	–
Unit profits	120.5	134.5	136.5	141.5	130.9	130.1	142.1	140.4	145.1	147.8	148.6	–
Unit nonlabor payments	106.4	107.1	108.0	108.4	107.2	107.8	109.6	109.4	110.0	110.0	110.0	–
Implicit price deflator	102.8	103.1	103.7	104.0	104.7	105.1	105.5	105.7	106.1	106.5	106.5	–
Manufacturing												
Output per hour of all persons	104.0	105.3	105.7	106.5	107.2	108.2	109.6	110.5	111.6	112.2	113.8	114.9
Compensation per hour	104.4	104.7	105.5	106.4	107.2	108.4	109.7	110.9	111.0	112.5	113.8	114.6
Real compensation per hour	99.9	99.5	99.4	99.6	99.7	99.9	100.6	101.1	100.4	100.8	101.4	101.3
Unit labor costs	100.4	99.4	99.8	99.9	100.0	100.2	100.1	100.4	99.4	100.3	100.0	99.8

39. Annual indexes of multifactor productivity and related measures, selected years

[1987 = 100]

Item	1960	1970	1973	1980	1988	1989	1990	1991	1992	1993	1994
Private business											
Productivity:											
Output per hour of all persons	53.5	74.8	83.0	89.1	100.9	101.0	101.9	102.9	105.9	106.4	107.3
Output per unit of capital services	115.9	115.1	120.1	105.8	101.3	101.3	99.8	97.0	98.1	99.1	100.7
Multifactor productivity	70.5	87.2	95.3	96.0	100.5	100.2	100.1	99.1	100.5	101.0	101.8
Output	37.8	57.4	67.9	79.9	104.3	107.0	107.9	106.5	109.3	112.5	117.4
Inputs:											
Labor input	66.7	74.2	78.7	86.8	104.2	107.2	107.8	106.5	107.5	110.4	114.8
Capital services	32.6	49.9	56.6	75.5	102.9	105.7	108.1	109.8	111.4	113.5	116.6
Combined units of labor and capital input	53.6	65.8	71.3	83.2	103.8	106.7	107.9	107.5	108.7	111.3	115.4
Capital per hour of all persons	46.2	65.0	69.2	84.2	99.6	99.7	102.1	106.1	108.0	107.4	106.6
Private nonfarm business											
Productivity:											
Output per hour of all persons	57.7	77.3	85.6	90.6	100.9	100.7	101.3	102.5	105.1	105.6	106.4
Output per unit of capital services	122.6	120.5	125.2	108.2	101.3	100.8	99.1	96.2	96.9	98.1	99.3
Multifactor productivity	74.9	89.9	98.1	97.7	100.5	99.9	99.4	98.5	99.6	100.2	100.7
Output	37.4	57.4	68.3	80.2	104.5	107.1	107.8	106.4	108.9	112.4	117.1
Inputs:											
Labor input	61.4	72.0	76.9	85.7	104.4	107.6	108.3	106.8	108.0	111.2	115.6
Capital services	30.5	47.7	54.5	74.2	103.2	106.2	108.8	110.6	112.4	114.7	118.0
Combined units of labor and capital input	49.9	63.9	69.6	82.1	104.0	107.2	108.5	107.9	109.3	112.2	116.3
Capital per hour of all persons	47.0	64.1	68.3	83.8	99.6	99.9	102.2	106.6	108.5	107.7	107.1
Manufacturing											
Productivity:											
Output per hour of all persons	45.9	61.3	69.4	79.1	101.1	102.8	104.7	107.2	111.1	113.4	–
Output per unit of capital services	122.7	116.6	126.9	102.5	101.6	100.6	97.0	93.0	93.5	94.5	–
Multifactor productivity	67.6	80.1	87.8	86.4	100.6	100.3	99.8	99.7	102.4	103.5	–
Output	40.8	61.6	74.0	82.1	104.2	106.4	105.9	104.1	107.2	111.0	–
Inputs:											
Hours of all persons	88.9	100.6	106.6	103.8	103.1	103.5	101.2	97.1	96.5	97.8	–
Capital services	33.2	52.8	58.3	80.1	102.6	105.8	109.2	111.9	114.6	117.4	–

– Data not available.

NOTE: Productivity and output in this table have not been revised for consistency with the December 1991 comprehensive revisions to the National Income and Product Accounts.

40. Annual indexes of productivity, hourly compensation, unit costs, and prices, selected years

[1992 = 100]

Item	1960	1970	1973	1986	1988	1989	1990	1991	1993	1994	1995	1996
Business												
Output per hour of all persons	51.5	70.4	78.2	94.2	94.6	95.3	96.1	96.7	100.2	100.7	100.8	101.9
Compensation per hour	13.7	23.6	29.0	77.0	83.5	85.8	90.7	95.1	102.5	104.5	107.8	111.8
Real compensation per hour	64.8	85.4	91.7	98.5	99.0	97.1	97.4	97.9	99.5	99.0	99.2	100.0
Unit labor costs	26.6	33.6	37.1	81.7	88.3	90.0	94.4	98.3	102.3	103.8	106.9	109.8
Unit nonlabor payments	24.6	30.8	36.8	81.6	84.1	91.3	93.5	96.6	102.8	106.5	107.6	107.3
Implicit price deflator	25.8	32.6	37.0	81.6	86.8	90.5	94.0	97.7	102.5	104.7	107.1	108.9
Nonfarm business												
Output per hour of all persons	54.9	72.7	80.8	94.9	95.2	95.7	96.2	96.9	100.2	100.7	100.9	101.7
Compensation per hour	14.3	23.8	29.2	77.3	83.6	85.9	90.6	95.1	102.3	104.3	107.7	111.6
Real compensation per hour	67.8	86.2	92.4	99.0	99.2	97.1	97.3	97.9	99.3	98.8	99.1	99.8
Unit labor costs	26.0	32.8	36.2	81.5	87.8	89.7	94.2	98.1	102.1	103.7	106.7	109.7
Unit nonlabor payments	24.0	30.3	34.3	81.3	83.8	90.7	93.1	96.8	103.4	107.0	108.2	107.1
Implicit price deflator	25.3	31.9	35.5	81.4	86.4	90.0	93.8	97.6	102.5	104.9	107.2	108.8
Nonfinancial corporations												
Output per hour of all employees	54.5	68.2	73.6	93.0	96.0	94.9	95.9	97.4	101.3	102.6	103.1	–
Compensation per hour	15.5	25.2	30.6	78.2	84.4	86.6	91.2	95.5	102.2	104.1	106.8	–
Real compensation per hour	73.4	91.0	96.6	100.1	100.1	98.0	97.9	98.4	99.2	98.5	98.3	–
Total unit costs	27.4	35.9	40.2	84.9	88.4	92.5	96.2	99.4	100.6	100.9	102.7	–
Unit labor costs	28.4	36.9	41.5	84.1	87.9	91.3	95.1	98.0	100.9	101.4	103.6	–
Unit nonlabor costs	24.8	33.4	36.7	87.0	89.6	95.8	99.0	103.1	99.9	99.6	100.1	–
Unit profits	52.3	47.3	59.2	90.1	107.7	98.1	93.9	91.9	114.8	133.4	136.0	–
Unit nonlabor payments	31.3	36.6	41.9	87.8	93.8	96.3	97.8	100.5	103.4	107.5	108.5	–
Implicit price deflator	29.3	36.8	41.6	85.3	89.8	92.9	96.0	98.8	101.7	103.4	105.2	–
Manufacturing												
Output per hour of all persons	41.2	55.0	62.5	87.4	90.9	92.5	94.2	96.5	102.1	105.2	108.9	113.0
Compensation per hour	14.9	23.8	28.6	78.6	84.0	86.7	90.9	95.7	102.4	105.1	109.0	112.9
Real compensation per hour	70.7	86.1	90.5	100.6	99.6	98.1	97.6	98.6	99.4	99.5	100.4	100.9
Unit labor costs	36.1	43.3	45.8	89.9	92.3	93.7	96.5	99.1	100.3	99.9	100.2	99.9
Unit nonlabor payments	26.8	30.5	37.5	86.4	91.8	96.9	100.6	99.9	101.1	–	–	–
Implicit price deflator	30.4	35.4	40.7	87.8	92.0	95.7	99.0	99.6	100.8	–	–	–

– Data not available.

41. Annual indexes of output per hour for selected industries

[1987 = 100]

Industry	SIC	1973	1984	1985	1986	1988	1989	1990	1991	1992	1993	1994
Iron mining, usable ore	101	50.8	70.0	76.1	79.3	103.1	98.4	88.5	85.0	83.3	86.9	82.2
Copper mining, recoverable metal	102	42.4	75.9	93.6	109.7	109.1	106.5	102.7	100.5	115.2	118.1	123.6
Coal mining	12	68.9	83.4	85.1	92.4	110.5	116.4	118.3	122.1	132.7	145.4	150.4
Crude petroleum and natural gas production	131	173.5	81.9	83.0	90.3	100.9	98.0	96.9	97.9	102.1	106.5	113.1
Nonmetallic minerals, except fuels	14	86.5	94.0	95.1	95.1	101.0	99.6	101.4	98.5	102.7	100.2	103.9
Meat packing plants	2011	65.1	93.6	98.3	98.7	100.9	97.9	96.8	100.2	104.5	105.1	101.2
Sausages and other prepared meats	2013	67.2	99.3	97.8	98.6	107.1	105.9	97.4	95.9	104.6	105.0	101.6
Poultry dressing and processing	2015	58.0	99.1	100.5	95.6	96.2	105.2	108.6	115.4	119.6	119.8	119.9
Cheese, natural and processed	2022	72.1	85.1	88.2	93.5	99.8	102.6	108.2	114.6	121.8	115.5	117.5
Fluid milk	2026	54.6	88.9	92.0	96.0	102.3	103.7	103.3	104.3	104.0	107.1	113.3
Canned fruits and vegetables	2033	70.1	87.4	92.8	99.1	98.7	92.9	93.8	100.1	101.5	106.6	101.9
Frozen fruits and vegetables	2037	77.9	99.7	95.2	103.3	94.0	98.0	90.0	94.6	96.4	102.8	109.6
Flour and other grain mill products	2041	68.5	91.7	95.8	95.9	102.5	102.5	107.9	108.3	111.9	122.2	126.8
Cereal breakfast foods	2043	65.6	92.8	97.1	98.6	98.6	95.5	100.2	102.3	99.1	95.5	106.6
Rice milling	2044	59.3	63.8	68.6	72.7	83.1	97.5	104.9	99.3	101.4	129.5	109.2
Wet corn milling	2046	24.1	74.9	74.6	97.3	96.1	103.6	103.8	100.4	101.8	111.9	110.0
Prepared feeds for animals and fowls	2047,48	51.6	89.2	96.9	95.2	101.5	103.7	107.0	108.0	108.1	110.7	108.5
Bakery products	205	82.3	93.4	95.6	100.1	93.4	91.0	93.2	89.2	89.4	90.3	91.0
Raw and refined cane sugar	2061,62	78.5	89.1	96.6	96.9	99.7	101.8	107.7	110.3	111.7	120.2	111.8
Beet sugar	2063	75.9	79.7	73.4	80.8	97.6	92.1	97.6	102.3	110.8	109.8	122.7
Malt beverages	2082	43.3	77.7	73.7	85.0	99.1	105.2	110.6	109.6	113.4	112.5	116.8
Bottled and canned soft drinks	2086	49.2	81.6	85.2	91.4	109.8	119.4	126.7	135.1	144.2	144.7	147.8
Fresh or frozen prepared fish	2092	93.3	89.4	87.8	91.2	100.0	94.6	88.9	87.4	95.6	100.1	94.3
Cigarettes, chewing and smoking tobacco	211,3	79.4	91.3	93.6	95.4	104.8	106.7	109.9	111.6	113.4	101.6	–
Cotton and synthetic broadwoven fabrics	221,2	58.1	91.1	94.8	101.1	100.0	103.9	108.1	113.8	118.4	125.8	133.8
Hosiery	2251,52	63.2	102.4	100.9	102.5	108.1	110.9	109.2	115.7	122.2	117.3	126.1
Yarn spinning mills	2281	55.9	86.2	89.6	93.2	98.5	103.3	106.0	105.5	114.1	120.0	126.9
Men's and boys' suits and coats	231	75.6	93.2	106.3	103.5	102.4	101.9	98.7	91.4	102.4	109.0	130.1
Housefurnishings, except curtains and draperies	2392	87.2	83.6	92.4	93.6	99.8	96.8	101.3	110.9	117.9	118.7	115.4
Sawmills and planing mills, general	2421	68.3	89.7	93.5	102.3	101.2	100.1	99.9	102.9	108.9	101.5	102.6
Hardwood dimension and flooring mills	2426	84.0	85.6	95.1	98.8	97.5	96.9	95.7	98.6	105.4	111.2	111.5
Millwork	2431	104.2	100.4	97.4	102.2	98.2	97.8	97.8	95.7	93.4	92.6	89.7
Wood kitchen cabinets	2434	80.5	91.6	87.1	85.2	97.7	91.1	93.6	92.3	102.0	101.9	95.9
Hardwood veneer and plywood	2435	80.2	83.9	84.5	83.2	99.0	98.9	92.2	93.3	104.1	105.8	94.4
Softwood veneer and plywood	2436	67.7	87.1	88.3	90.4	100.6	102.6	108.3	114.3	109.2	103.4	101.9
Wood containers	244	–	103.4	99.6	98.7	103.2	108.8	111.6	113.5	109.8	100.5	101.8
Wood household furniture	2511,17	88.5	96.9	95.0	99.6	100.8	101.2	102.5	101.3	106.5	106.2	106.4
Upholstered household furniture	2512	75.1	96.2	96.3	101.7	98.8	101.2	107.7	115.1	120.0	120.0	130.2
Metal household furniture	2514	68.7	84.9	89.4	95.3	100.2	100.7	101.4	107.2	109.5	106.8	99.5
Mattresses and bedsprings	2515	68.0	84.1	79.5	85.5	92.5	106.5	106.2	108.9	103.4	104.4	105.9
Wood office furniture	2521	82.5	99.3	99.4	96.2	95.4	95.4	97.4	101.3	107.1	104.4	104.0
Office furniture, except wood	2522	70.6	97.6	96.9	100.6	96.0	98.7	95.6	92.9	93.9	94.3	94.3
Pulp, paper, and paperboard mills	261,2,3	67.1	89.7	87.6	93.3	103.1	103.2	102.6	102.1	104.7	104.5	111.4
Corrugated and solid fiber boxes	2635	70.3	96.7	99.6	102.8	99.8	98.1	100.9	100.8	101.9	105.5	110.6
Folding paperboard boxes	2657	86.4	93.4	90.0	88.5	101.6	105.4	105.3	110.9	116.4	117.9	122.2
Paper and plastic bags	2673,74	90.7	99.9	99.7	101.8	97.7	93.7	92.2	89.5	93.9	92.0	96.0
Alkalies and chlorine	2812	38.4	66.6	70.8	97.7	101.6	92.5	92.3	86.2	87.7	84.8	84.1
Inorganic pigments	2816	72.6	81.4	84.4	88.6	103.3	107.8	104.5	98.9	107.8	107.9	113.2
Industrial inorganic chemicals, n.e.s.	2819 pt.	90.6	88.4	87.3	88.6	97.5	105.9	109.0	102.3	104.9	110.7	111.1
Synthetic fibers	2823,24	38.4	79.8	79.3	90.8	102.9	104.1	98.7	97.5	99.3	112.3	119.4
Soaps and detergents	2841	89.1	90.5	91.5	92.3	102.4	109.4	128.2	126.4	115.3	112.6	111.2
Cosmetics and other toiletries	2844	88.6	87.3	90.3	96.6	105.2	102.7	101.1	103.9	108.4	108.5	111.8
Paints and allied products	285	63.2	93.6	96.9	98.0	101.4	103.3	106.3	104.3	102.9	108.7	116.5
Industrial inorganic chemicals, n.e.c.	2869	73.1	89.6	87.8	92.3	110.5	110.5	99.0	92.6	91.6	88.5	96.6
Nitrogenous fertilizers	2873	65.4	101.1	100.7	90.5	101.3	103.3	107.7	108.4	111.8	117.5	111.1
Phosphatic fertilizers	2874	62.4	88.4	84.2	79.6	92.0	83.3	99.7	107.3	105.0	105.8	122.4
Fertilizers, mixing only	2875	90.5	97.8	100.8	95.1	104.7	112.4	112.8	114.6	127.1	139.1	118.9
Agricultural chemicals, n.e.c.	2879	74.3	98.8	92.9	93.2	108.4	108.9	106.2	102.2	108.4	111.0	115.6
Petroleum refining	291	84.0	78.7	84.7	94.9	105.3	109.6	109.2	106.6	111.3	120.1	123.8
Tires and inner tubes	301	56.0	88.8	89.3	92.6	102.9	103.8	103.0	102.4	107.8	116.5	119.9
Rubber and plastics hose and belting	3052	78.4	104.9	100.1	102.1	108.2	97.8	103.3	96.1	104.3	111.3	104.9
Miscellaneous plastics products, n.e.c.	308	72.8	86.4	88.2	88.9	100.1	101.1	105.3	107.5	114.0	116.2	119.7
Footwear, except rubber	314	90.7	98.8	100.3	101.9	102.3	100.9	92.8	93.1	93.3	97.2	102.7
Glass containers	3221	75.2	97.4	93.4	98.5	99.6	101.6	107.5	108.1	111.5	106.0	111.7
Cement, hydraulic	324	71.3	89.4	91.8	97.1	103.2	110.2	112.4	108.3	115.1	119.9	125.6
Clay construction products	3251,53,59	78.5	92.7	94.2	95.5	105.2	98.3	102.3	97.4	98.9	102.3	107.7
Clay refractories	3255	80.1	96.9	94.9	100.8	102.3	98.5	103.6	97.9	98.6	95.0	104.6
Concrete products	3271,72	92.5	98.3	99.5	104.4	102.1	104.8	103.8	104.9	103.2	109.3	107.9
Ready-mixed concrete	3273	99.1	92.9	93.6	96.0	100.2	101.0	100.2	96.7	98.2	96.9	93.1
Steel	331	64.2	81.3	85.8	89.7	113.5	108.5	110.5	108.2	117.7	134.2	142.7
Gray and ductile iron foundries	3321	91.3	99.1	96.9	99.3	108.0	106.9	107.9	104.6	107.7	113.1	115.7
Steel foundries	3324,25	105.8	102.4	99.5	104.9	95.5	96.3	96.9	94.8	95.6	101.5	100.3
Primary copper	3331	32.8	57.6	73.8	88.7	103.8	94.7	84.9	82.5	71.9	86.9	73.9
Primary aluminum	3334	73.6	100.7	97.6	102.7	102.3	104.8	106.5	110.6	109.7	105.7	98.6
Copper rolling and drawing	3351	77.5	84.7	86.2	92.3	93.0	89.1	90.7	86.4	83.0	89.2	95.1

See footnotes at end of table.

41. Continued—Annual indexes of output per hour for selected industries

[1987 = 100]

Industry	SIC	1973	1984	1985	1986	1988	1989	1990	1991	1992	1993	1994
Aluminum rolling and drawing	3353,54,55	79.0	92.3	85.7	95.8	96.3	90.6	91.2	90.3	96.5	93.9	99.8
Metal cans	3411	59.2	101.1	99.2	95.9	106.9	108.1	117.5	123.8	129.7	134.6	140.7
Hand and edge tools, n.e.c.	3423	108.6	97.9	98.8	97.1	100.5	101.0	95.0	93.1	93.1	93.3	101.8
Heating equipment, except electric	3433	78.0	91.6	91.9	96.2	113.7	105.0	114.0	119.4	121.2	121.8	124.8
Fabricated structural metal	3441	97.1	91.2	99.0	99.0	100.4	97.6	101.2	104.5	103.6	108.1	109.6
Metal doors, sash, and trim	3442	90.5	101.4	104.8	102.0	104.6	105.8	103.1	103.0	106.7	105.4	103.2
Fabricated plate work	3443	–	88.3	87.5	86.4	96.2	90.3	94.1	94.3	98.3	98.3	108.4
Bolts, nuts, rivets, and washers	3452	75.8	85.3	88.8	91.0	97.0	93.8	93.7	96.1	91.9	92.8	95.6
Automotive stampings	3465	74.9	100.5	94.5	95.7	102.8	101.8	96.1	97.3	113.8	120.8	124.5
Metal stampings, n.e.c.	3469	96.8	94.3	88.6	93.9	98.0	95.3	90.4	89.5	98.8	104.8	109.3
Valves and pipe fittings	3491,92,94	93.6	95.0	94.4	93.9	101.4	101.2	102.1	101.7	100.4	104.2	110.1
Fabricated pipe and fittings	3498	140.8	130.0	120.0	121.4	99.6	102.3	107.0	114.2	109.6	113.3	110.3
Internal combustion engines, n.e.c.	3519	83.1	90.2	92.0	98.5	106.3	113.2	108.4	103.3	101.2	104.3	118.3
Farm machinery and equipment	3523	108.6	112.7	101.6	95.7	112.8	124.0	131.8	125.3	119.1	123.7	134.2
Lawn and garden equipment	3524	70.0	79.3	82.4	93.2	97.5	93.2	94.8	95.8	108.7	114.7	116.3
Construction machinery	3531	87.9	91.6	92.2	99.1	107.6	110.2	109.6	101.0	100.6	107.0	123.7
Mining machinery	3532	102.2	90.2	93.7	95.1	102.0	107.0	98.4	90.0	90.1	109.5	97.4
Oil and gas field machinery	3533	156.9	126.0	115.2	105.9	123.1	116.1	113.9	110.9	125.7	122.1	123.6
Metal cutting machine tools	3541	101.4	87.2	89.9	92.0	94.8	99.9	99.2	94.8	113.0	111.4	109.2
Metal forming machine tools	3542	112.5	90.7	93.1	93.7	113.1	107.9	97.7	88.4	102.5	115.0	103.0
Machine tool accessories	3545	105.9	94.6	92.3	95.0	98.2	102.5	104.1	104.6	96.8	101.5	112.6
Pumps and pumping equipment	3561,94	84.0	92.0	91.9	92.7	105.7	101.3	103.4	102.5	98.6	105.2	109.3
Ball and roller bearings	3562	108.0	95.4	91.6	94.1	102.9	99.0	93.1	89.6	97.8	103.8	107.2
Air and gas compressors	3563	87.6	90.1	92.2	96.0	103.7	105.3	107.8	110.2	112.7	111.4	116.5
Refrigeration and heating equipment	3585	100.3	100.1	98.1	95.8	104.0	109.0	106.3	104.8	107.6	111.8	115.8
Carburetors, pistons, rings, and valves	3592	102.9	95.1	98.8	95.7	109.9	119.4	114.1	115.1	126.4	136.5	139.8
Transformers, except electronic	3612	100.2	95.4	97.0	99.3	102.8	104.3	107.3	110.7	126.5	121.7	141.2
Switchgear and switchboard apparatus	3613	88.2	92.2	95.1	95.9	109.1	106.5	106.5	103.9	114.6	123.0	124.5
Motors and generators	3621	89.0	93.3	94.9	96.8	102.8	103.6	100.9	104.4	111.5	127.0	123.2
Household cooking equipment	3631	61.8	92.0	90.3	104.6	116.1	96.8	99.5	104.9	100.9	103.7	127.5
Household refrigerators and freezers	3632	70.1	97.5	104.1	101.2	103.3	105.2	107.3	111.8	116.0	116.8	126.7
Household laundry equipment	3633	72.3	92.8	93.8	97.4	106.1	98.7	104.0	111.0	115.9	144.8	150.5
Household appliances, n.e.c.	3639	63.7	85.9	86.3	89.1	100.6	96.3	91.8	80.5	91.6	117.6	119.1
Electric lamp bulbs and tubes	3641	61.3	86.4	94.2	91.5	100.3	92.7	98.0	101.8	112.8	100.9	97.7
Lighting fixtures and equipment	3645,46,47,48	84.1	91.3	96.7	103.0	98.1	97.3	96.0	94.3	98.9	103.7	109.6
Household audio and video equipment	3651	22.3	84.7	96.3	106.9	106.2	120.5	124.1	135.7	151.8	163.1	175.7
Motor vehicles and equipment	371	68.7	91.1	95.3	95.1	103.2	103.3	102.4	96.7	104.3	105.4	108.6
Aircraft	3721	79.2	84.7	94.2	93.5	105.8	107.5	112.9	131.4	141.7	142.4	131.7
Instruments to measure electricity	3825	63.7	96.2	95.4	90.4	106.1	105.2	106.2	108.3	119.0	122.4	145.0
Photographic equipment and supplies	386	58.9	88.2	86.1	94.1	105.6	113.0	107.8	110.2	116.4	126.6	131.9
Railroad transportation, revenue traffic	4011	46.5	78.0	81.5	89.2	108.4	114.6	118.5	127.8	139.6	–	–
Bus carriers, class 1	411,13,14 pts.	116.8	100.1	96.1	95.6	107.9	104.6	–	–	–	–	–
Trucking, except local	4213	69.5	97.3	93.8	96.8	105.2	109.4	–	–	–	–	–
Air transportation	4512,13,22 pts.	54.3	88.8	92.0	93.8	99.5	95.8	92.9	92.5	96.9	103.8	105.7
Petroleum pipelines	4612,13	93.2	99.4	99.9	102.0	104.8	103.2	102.5	99.0	100.2	104.4	105.1
Telephone communications	481	42.7	84.5	88.9	95.0	106.2	111.6	113.3	119.8	127.7	134.5	135.7
Electric utilities	491,3 pt.	88.4	93.8	93.0	95.3	104.9	107.7	110.1	113.4	115.2	120.6	127.7
Gas utilities	492,3 pt	145.5	114.1	111.9	102.1	105.5	103.5	94.8	94.0	95.3	105.0	100.3
Scrap and waste materials	5093	–	89.1	93.4	97.7	95.4	86.0	98.6	98.9	101.7	109.4	106.6
Hardware stores	525	83.3	96.6	95.6	101.6	108.6	115.2	110.4	102.5	107.2	106.7	114.1
Department stores	531	60.8	90.4	92.6	97.4	99.2	96.9	94.2	98.2	101.2	105.0	108.5
Variety stores	533	148.9	141.9	129.2	106.7	101.9	124.5	151.3	154.3	167.7	170.4	155.2
Grocery stores	541	109.1	107.9	105.7	103.8	98.9	95.4	94.6	93.7	93.3	92.7	91.7
Retail bakeries	546	125.6	96.0	87.6	93.6	89.8	83.3	89.7	94.7	94.0	86.0	87.8
New and used car dealers	551	85.1	99.5	99.8	101.6	103.5	102.5	106.1	104.2	106.5	107.7	109.2
Auto and home supply stores	553	71.1	90.4	94.5	94.3	103.2	101.5	102.8	98.9	98.9	98.9	101.4
Gasoline service stations	554	59.5	87.0	93.5	101.8	103.0	105.1	102.6	104.3	109.7	112.4	115.0
Men's and boys' clothing stores	561	77.6	93.7	98.3	100.7	106.0	109.3	112.8	117.7	116.4	115.7	138.1
Women's clothing stores	562	58.9	98.0	99.8	107.0	97.5	99.1	100.8	101.9	110.7	116.2	115.9
Family clothing stores	565	76.2	106.2	103.1	103.3	102.4	105.5	104.9	106.9	112.3	111.6	116.7
Shoe stores	566	81.3	90.6	97.6	105.5	102.7	107.2	106.2	105.1	111.5	110.8	117.8
Furniture and homefurnishings stores	571	83.9	97.9	94.8	101.2	98.9	101.3	102.2	101.6	108.6	108.9	108.7
Household appliance stores	572	59.8	87.2	94.9	106.5	98.5	103.5	102.8	105.2	113.9	114.6	126.3
Radio, television, and computer stores	573	45.6	79.1	89.3	94.1	119.3	115.7	120.9	129.6	143.5	157.3	181.0
Eating and drinking places	58	110.3	98.9	96.2	99.3	102.8	102.2	104.0	103.1	102.4	103.1	103.8
Drug stores and proprietary stores	591	92.2	106.4	102.5	101.6	101.9	102.5	103.6	104.7	103.6	104.7	103.7
Liquor stores	592	95.0	93.6	101.9	93.8	98.2	101.1	105.2	105.9	108.4	100.5	96.7
Miscellaneous shopping goods stores	594	–	92.6	94.1	97.1	98.4	101.7	101.5	102.0	100.6	103.9	105.6
Commercial banks	602	81.2	89.6	94.3	96.2	103.4	102.2	108.6	112.3	117.2	129.9	–
Hotels and motels	701	102.4	101.6	101.2	98.9	97.6	95.0	96.0	99.0	107.6	106.5	110.0
Laundry, cleaning, and garment services	721	110.8	107.5	103.3	100.8	97.2	100.5	101.0	98.7	99.9	99.8	101.8
Beauty shops	723	85.9	98.5	96.1	96.9	95.1	99.6	96.8	94.8	99.7	95.9	100.0
Automotive repair shops	753	109.3	91.7	99.4	96.2	105.7	108.2	107.0	98.8	103.4	103.7	111.6

n.e.s. = not elsewhere specified.
n.e.c. = not elsewhere classified.
– Data not available.

42. Unemployment rates, approximating U.S. concepts, in nine countries, quarterly data seasonally adjusted

Country	Annual average		1995				1996			
	1995	1996	I	II	III	IV	I	II	III	IV
United States	5.6	5.4	5.5	5.6	5.7	5.6	5.6	5.4	5.3	5.3
Canada	9.5	9.7	9.7	9.5	9.5	9.4	9.5	9.6	9.7	9.9
Australia	8.5	8.6	8.8	8.4	8.4	8.4	8.5	8.6	8.7	8.6
Japan	3.2	3.4	3.0	3.2	3.2	3.4	3.3	3.5	3.4	3.3
France	11.7	–	11.9	11.6	11.5	11.7	12.2	12.5	12.7	–
Germany	6.5	–	6.5	6.5	6.6	6.7	7.0	7.1	7.2	–
Italy[1]	12.0	–	12.0	12.1	11.9	11.9	12.0	12.5	11.9	–
Sweden	9.1	9.8	9.1	9.0	8.9	9.3	9.4	9.7	9.9	10.2
United Kingdom	8.8	8.3	8.9	8.8	8.8	8.6	8.4	8.4	8.3	8.0

[1] Quarterly rates are for the first month of the quarter.

– Data not available.

NOTE: Quarterly figures for France, Germany, and the United Kingdom are calculated by applying annual adjustment factors to current published data, and therefore should be viewed as less precise indicators of unemployment under U.S. concepts than the annual figures. See "Notes on the data" for information on breaks in series. For further qualifications and historical data, see *Comparative Labor Force Statistics, 10 Countries* (Bureau of Labor Statistics, August 1996.)

43. Annual data: Employment status of the working-age population, approximating U.S. concepts, 10 countries

[Numbers in thousands]

Employment status and country	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Civilian labor force										
United States[1]	117,834	119,865	121,669	123,869	125,840	126,346	128,105	129,200	131,056	132,304
Canada	13,378	13,631	13,900	14,151	14,329	14,408	14,482	14,663	14,832	14,928
Australia	7,588	7,758	7,974	8,228	8,444	8,490	8,562	8,619	8,776	9,001
Japan	59,410	60,050	60,860	61,920	63,050	64,280	65,040	65,470	65,780	65,990
France	23,760	23,890	23,980	24,170	24,300	24,490	24,540	24,610	24,780	24,850
Germany	28,240	28,390	28,610	28,840	29,410	29,760	30,030	29,950	29,820	29,660
Italy	22,290	22,350	22,660	22,530	22,670	22,940	22,910	22,760	22,640	22,700
Netherlands	6,380	6,500	6,330	6,450	6,660	6,770	6,970	7,110	7,180	7,290
Sweden	4,443	4,437	4,494	4,552	4,597	4,591	4,520	4,443	4,418	4,460
United Kingdom	27,380	27,720	28,150	28,420	28,540	28,450	28,400	28,310	28,310	28,190
Participation rate[2]										
United States[1]	65.3	65.6	65.9	66.5	66.5	66.2	66.4	66.3	66.6	66.6
Canada	66.3	66.7	67.2	67.5	67.3	66.7	65.9	65.5	65.3	64.8
Australia	62.8	63.0	63.3	64.0	64.6	64.1	63.9	63.6	63.9	64.6
Japan	62.1	61.9	61.9	62.2	62.6	63.2	63.4	63.3	63.1	62.9
France	56.9	56.7	56.4	56.1	56.0	56.0	55.7	55.5	55.5	55.3
Germany	54.9	55.0	55.1	55.2	55.3	55.4	55.1	54.2	53.7	53.1
Italy	47.8	47.6	47.4	47.3	47.2	47.7	47.5	48.1	47.5	47.6
Netherlands	56.0	56.3	54.3	54.9	56.3	56.7	57.9	58.6	58.9	59.7
Sweden	67.0	66.4	66.9	67.3	67.4	67.0	65.7	64.5	63.9	64.3
United Kingdom	62.1	62.5	63.2	63.6	63.7	63.3	62.9	62.8	62.6	62.2
Employed										
United States[1]	109,597	112,440	114,968	117,342	118,793	117,718	118,492	120,259	123,060	124,900
Canada	12,095	12,422	12,819	13,086	13,165	12,916	12,842	13,015	13,292	13,506
Australia	6,974	7,129	7,398	7,720	7,859	7,676	7,637	7,680	7,921	8,235
Japan	57,740	58,320	59,310	60,500	61,710	62,920	63,620	63,810	63,860	63,890
France	21,240	21,320	21,520	21,850	22,100	22,140	21,980	21,700	21,730	21,940
Germany	26,380	26,590	26,800	27,200	27,950	28,480	28,660	28,230	27,880	27,720
Italy	20,610	20,590	20,870	20,770	21,080	21,360	21,230	20,430	20,080	19,970
Netherlands	5,740	5,850	5,850	5,990	6,250	6,370	6,570	6,640	6,650	6,760
Sweden	4,326	4,340	4,410	4,480	4,513	4,447	4,265	4,028	3,992	4,056
United Kingdom	24,300	24,860	25,730	26,350	26,550	25,930	25,520	25,340	25,580	25,710
Employment-population ratio[3]										
United States[1]	60.7	61.5	62.3	63.0	62.8	61.7	61.5	61.7	62.5	62.9
Canada	59.9	60.8	62.0	62.4	61.9	59.8	58.4	58.2	58.5	58.6
Australia	57.7	57.9	58.7	60.1	60.1	57.9	57.0	56.6	57.7	59.1
Japan	60.4	60.1	60.4	60.8	61.3	61.8	62.0	61.7	61.3	60.9
France	50.8	50.6	50.6	50.7	50.9	50.6	49.9	48.9	48.7	48.8
Germany	51.3	51.5	51.6	52.0	52.6	53.0	52.6	51.1	50.2	49.7
Italy	44.2	43.8	43.7	43.6	43.9	44.5	44.0	43.1	42.1	41.8
Netherlands	50.3	50.7	50.2	51.0	52.8	53.3	54.6	54.8	54.6	55.4
Sweden	65.2	65.0	65.7	66.2	66.1	64.9	62.0	58.5	57.7	58.5
United Kingdom	55.1	56.1	57.8	59.0	59.2	57.7	56.5	56.2	56.5	56.7
Unemployed										
United States[1]	8,237	7,425	6,701	6,528	7,047	8,628	9,613	8,940	7,996	7,404
Canada	1,283	1,208	1,082	1,065	1,164	1,492	1,640	1,649	1,541	1,422
Australia	613	629	576	508	585	814	925	939	856	766
Japan	1,670	1,730	1,550	1,420	1,340	1,360	1,420	1,660	1,920	2,100
France	2,520	2,570	2,460	2,320	2,200	2,350	2,560	2,910	3,050	2,910
Germany	1,860	1,800	1,810	1,640	1,460	1,280	1,370	1,720	1,940	1,940
Italy	1,680	1,760	1,790	1,760	1,590	1,580	1,680	2,330	2,560	2,720
Netherlands	640	650	480	450	410	400	390	470	520	530
Sweden	117	97	84	72	84	144	255	415	426	404
United Kingdom	3,080	2,860	2,420	2,070	1,990	2,520	2,880	2,970	2,730	2,480
Unemployment rate										
United States[1]	7.0	6.2	5.5	5.3	5.6	6.8	7.5	6.9	6.1	5.6
Canada	9.6	8.9	7.8	7.5	8.1	10.4	11.3	11.2	10.4	9.5
Australia	8.1	8.1	7.2	6.2	6.9	9.6	10.8	10.9	9.7	8.5
Japan	2.8	2.9	2.5	2.3	2.1	2.1	2.2	2.5	2.9	3.2
France	10.6	10.8	10.3	9.6	9.0	9.6	10.4	11.8	12.3	11.7
Germany	6.6	6.3	6.3	5.7	5.0	4.3	4.6	5.7	6.5	6.5
Italy	7.5	7.9	7.9	7.8	7.0	6.9	7.3	10.2	11.3	12.0
Netherlands	10.0	10.0	7.6	7.0	6.2	5.9	5.6	6.6	7.2	7.3
Sweden	2.6	2.2	1.9	1.8	1.8	3.1	5.6	9.3	9.6	9.1
United Kingdom	11.2	10.3	8.6	7.3	7.0	8.9	10.1	10.5	9.6	8.8

[1] Data for 1994 are not directly comparable with data for 1993 and earlier years. For additional information, see the box note under "Employment and Unemployment Data" in the notes to this section.

[2] Labor force as a percent of the working-age population.

[3] Employment as a percent of the working-age population.

NOTE: See "Notes on the data" for information on breaks in series for the United States, France, Italy, the Netherlands, and Sweden.

44. Annual indexes of manufacturing productivity and related measures, 12 countries

[1992 = 100]

Item and country	1960	1970	1973	1985	1986	1987	1988	1989	1990	1991	1993	1994	1995
Output per hour													
United States	–	–	–	83.7	85.9	91.4	93.5	94.0	95.7	97.9	103.6	108.1	111.9
Canada	40.5	60.4	72.2	94.1	92.6	93.5	93.9	94.3	95.8	96.3	101.8	105.6	107.2
Japan	14.0	38.0	48.1	77.3	76.9	81.2	84.8	89.5	95.4	99.4	100.5	101.2	106.6
Belgium	18.7	34.2	44.7	85.5	86.7	88.4	91.4	96.2	95.6	98.7	104.2	110.1	–
Denmark	29.5	52.1	66.1	95.6	90.0	89.6	92.9	96.1	96.0	97.9	106.4	–	–
France	23.0	45.5	53.9	83.8	85.2	86.7	92.7	97.4	99.1	98.7	101.8	110.4	113.7
Germany	29.0	51.9	60.9	88.7	89.3	88.1	91.2	94.3	98.2	101.7	101.2	108.5	112.0
Italy	19.6	36.8	43.9	81.5	82.6	85.0	86.6	89.4	92.8	95.3	104.5	106.9	111.2
Netherlands	19.9	39.6	50.4	89.8	91.2	91.9	93.9	97.3	98.6	99.6	101.9	109.4	–
Norway	36.2	57.0	66.6	90.4	89.5	94.0	93.2	93.8	96.8	96.2	100.4	102.2	103.1
Sweden	27.6	52.8	62.1	87.2	88.6	90.1	90.8	93.8	95.0	95.0	106.7	115.7	119.6
United Kingdom	30.5	43.7	51.9	71.9	74.7	78.8	83.1	87.1	90.1	94.4	105.4	109.4	109.4
Output													
United States	–	–	–	87.6	88.5	94.9	99.9	100.8	100.4	98.5	105.0	112.3	116.2
Canada	34.2	61.0	77.6	98.5	99.3	104.1	109.4	110.3	106.2	98.7	104.8	112.1	117.2
Japan	10.7	38.8	50.0	76.1	74.9	78.4	84.6	90.2	96.3	101.4	96.0	94.8	97.8
Belgium	32.2	60.3	74.0	88.1	88.1	88.4	92.8	98.4	99.6	100.0	97.1	101.5	–
Denmark	40.1	66.8	78.1	101.7	101.7	97.6	99.1	100.3	99.3	99.2	100.7	102.8	106.1
France	32.4	66.9	80.1	91.2	91.2	91.1	96.3	101.6	103.5	101.7	96.2	101.3	104.6
Germany	41.5	70.9	78.5	88.3	89.7	88.0	90.9	94.0	99.1	102.8	92.0	94.1	94.6
Italy	21.5	44.8	54.1	82.6	84.8	88.5	94.8	98.6	100.4	99.7	96.6	101.4	107.3
Netherlands	32.8	61.8	70.2	86.0	88.1	89.3	92.7	96.9	100.1	100.6	97.8	101.4	–
Norway	56.6	89.2	102.3	109.8	109.8	111.9	106.5	100.5	100.4	97.0	102.4	108.0	111.1
Sweden	46.4	81.6	88.5	104.0	105.3	107.7	110.2	111.7	110.6	103.5	101.3	115.3	126.1
United Kingdom	68.4	91.2	100.6	89.9	91.1	95.3	102.0	106.6	106.4	100.6	101.2	105.5	107.6
Total hours													
United States	92.2	104.5	110.5	104.7	103.1	103.9	106.9	107.3	104.9	100.6	101.4	103.8	103.9
Canada	84.5	100.9	107.5	104.8	107.2	111.4	116.5	117.0	110.8	102.5	102.9	106.2	109.3
Japan	76.3	102.3	104.0	98.4	97.3	96.6	99.8	100.8	100.9	102.0	95.6	93.7	91.7
Belgium	172.1	176.3	165.7	103.0	101.6	100.0	101.5	102.3	104.3	101.3	93.2	92.2	–
Denmark	135.8	128.3	118.1	106.5	113.1	109.0	106.6	104.3	103.3	101.3	94.7	–	–
France	140.6	147.0	148.7	108.9	107.2	105.1	104.0	104.4	104.5	103.0	94.5	91.8	91.9
Germany	143.0	136.6	128.9	99.6	100.4	99.9	99.6	99.7	101.0	101.1	90.9	86.8	84.5
Italy	109.6	121.8	123.4	101.4	102.7	104.1	109.5	110.2	108.2	104.6	92.4	94.8	96.4
Netherlands	165.3	156.2	139.4	95.8	96.6	97.2	98.7	99.6	101.6	101.0	95.9	92.7	–
Norway	156.3	156.6	153.5	121.5	122.7	119.0	114.3	107.1	103.7	100.8	102.1	105.7	107.8
Sweden	168.3	154.7	142.5	119.3	118.8	119.5	121.4	119.0	116.4	109.0	95.0	99.6	105.4
United Kingdom	224.4	208.6	194.0	125.1	121.9	120.9	122.7	122.3	118.0	106.6	96.0	96.4	98.3
Compensation per hour													
United States	14.9	23.8	28.6	75.3	78.6	80.8	84.0	86.7	90.9	95.7	102.4	105.1	108.0
Canada	10.5	18.3	22.9	74.6	77.5	79.8	83.3	86.4	91.3	97.1	100.1	102.4	103.7
Japan	4.3	16.5	26.8	72.5	76.1	77.9	79.2	84.2	90.7	95.9	104.6	106.8	110.3
Belgium	5.5	14.1	21.6	74.1	77.2	79.0	80.6	84.8	89.6	95.3	105.0	108.4	–
Denmark	4.6	13.2	20.4	71.4	72.9	79.7	82.5	87.2	92.6	96.2	102.4	–	–
France	4.3	10.5	14.9	73.8	76.9	79.7	82.8	87.2	91.8	96.3	103.6	106.2	107.9
Germany	8.1	20.7	29.0	70.0	73.0	76.4	79.3	83.1	89.0	95.0	106.0	110.5	116.1
Italy	1.6	4.6	7.0	60.1	62.6	66.1	68.7	75.5	84.0	93.1	107.1	106.4	109.7
Netherlands	6.5	20.5	31.9	82.0	85.2	87.9	87.6	88.4	90.8	95.0	104.6	106.1	–
Norway	4.7	11.7	16.7	62.7	68.7	78.5	83.3	87.2	92.3	97.5	101.5	104.8	109.4
Sweden	4.1	10.8	15.2	58.6	63.4	67.6	72.0	79.6	87.8	95.7	97.8	101.8	107.3
United Kingdom	3.1	6.5	9.8	55.8	60.6	67.3	71.7	75.4	83.7	93.4	105.3	107.4	110.9
Unit labor costs: National currency basis													
United States	–	–	–	89.9	91.6	88.5	89.8	92.2	95.0	97.7	98.8	97.2	96.6
Canada	25.9	30.3	31.8	79.3	83.6	85.3	88.7	91.7	95.2	100.9	98.3	97.0	96.7
Japan	30.9	43.3	55.7	93.8	99.0	96.0	93.4	94.0	95.0	96.5	104.1	105.6	103.4
Belgium	29.7	41.1	48.3	86.7	89.0	89.3	88.2	88.2	93.7	96.5	100.7	98.5	–
Denmark	15.5	25.3	30.8	74.7	81.0	89.0	88.8	90.7	96.5	98.3	96.3	97.8	101.3
France	18.8	23.1	27.7	88.1	90.3	92.0	89.3	89.6	92.7	97.5	101.8	96.2	94.9
Germany	28.0	40.0	47.7	79.0	81.7	86.7	86.9	88.2	90.6	93.3	104.7	101.8	103.7
Italy	8.0	12.6	16.0	73.8	75.8	77.8	79.4	84.4	90.5	97.7	102.5	99.5	98.6
Netherlands	32.9	51.8	63.4	91.3	93.4	95.7	93.3	90.8	92.1	95.4	102.6	97.0	–
Norway	12.9	20.5	25.1	69.4	76.8	83.5	89.3	93.0	95.4	101.3	101.1	102.6	106.1
Sweden	15.0	20.6	24.5	67.3	71.5	74.9	79.2	84.9	92.5	100.7	91.7	88.0	89.7
United Kingdom	10.3	14.8	19.0	77.6	81.1	85.4	86.2	86.5	92.8	98.9	99.9	98.1	101.3
Unit labor costs: U.S. dollar basis													
United States	–	–	–	89.9	91.6	88.5	89.8	92.2	95.0	97.7	98.8	97.2	96.6
Canada	32.3	35.1	38.4	70.1	72.7	77.8	87.1	93.6	98.6	106.4	92.1	85.8	85.1
Japan	10.9	15.3	26.1	49.9	74.5	84.2	92.4	86.3	83.1	90.9	118.8	131.0	139.5
Belgium	19.1	26.6	40.0	47.0	64.1	76.9	77.1	72.0	90.2	90.7	93.6	94.7	–
Denmark	13.5	20.4	30.9	42.6	60.4	78.4	79.5	74.8	94.1	92.7	89.6	92.9	109.2
France	20.3	22.1	33.0	51.9	69.0	81.0	79.4	74.3	90.1	91.4	95.1	91.8	100.8
Germany	10.5	17.1	28.1	41.9	58.8	75.3	77.3	73.2	87.6	87.8	98.9	98.1	113.1
Italy	15.9	24.7	34.0	47.6	62.6	73.9	75.1	75.8	93.0	97.0	80.3	76.1	74.6
Netherlands	15.3	25.2	40.1	48.4	67.1	83.0	83.0	75.3	88.9	89.6	97.1	93.8	–
Norway	11.3	17.8	27.2	50.2	64.5	77.0	85.1	83.6	94.8	97.0	88.5	90.4	104.0
Sweden	16.9	23.1	32.8	45.6	58.4	68.8	75.2	76.6	90.9	97.0	68.5	66.4	73.2
United Kingdom	16.3	20.0	26.3	57.0	67.4	79.2	86.9	80.2	93.8	99.0	85.0	85.1	90.6

– Data not available.

45. Occupational injury and illness rates by industry,[1] United States

Industry and type of case[2]	Incidence rates per 100 full-time workers[3]									
	1985	1986	1987	1988	1989[1]	1990	1991	1992	1993[4]	1994[4]
PRIVATE SECTOR[5]										
Total cases	7.9	7.9	8.3	8.6	8.6	8.8	8.4	8.9	8.5	8.4
Lost workday cases	3.6	3.6	3.8	4.0	4.0	4.1	3.9	3.9	3.8	3.8
Lost workdays	64.9	65.8	69.9	76.1	78.7	84.0	86.5	93.8	–	–
Agriculture, forestry, and fishing[6]										
Total cases	11.4	11.2	11.2	10.9	10.9	11.6	10.8	11.6	11.2	10.0
Lost workday cases	5.7	5.6	5.7	5.6	5.7	5.9	5.4	5.4	5.0	4.7
Lost workdays	91.3	93.6	94.1	101.8	100.9	112.2	108.3	126.9	–	–
Mining										
Total cases	8.4	7.4	8.5	8.8	8.5	8.3	7.4	7.3	6.8	6.3
Lost workday cases	4.8	4.1	4.9	5.1	4.8	5.0	4.5	4.1	3.9	3.9
Lost workdays	145.3	125.9	144.0	152.1	137.2	119.5	129.6	204.7	–	–
Construction										
Total cases	15.2	15.2	14.7	14.6	14.3	14.2	13.0	13.1	12.2	11.8
Lost workday cases	6.8	6.9	6.8	6.8	6.8	6.7	6.1	5.8	5.5	5.5
Lost workdays	128.9	134.5	135.8	142.2	143.3	147.9	148.1	161.9	–	–
General building contractors:										
Total cases	15.2	14.9	14.2	14.0	13.9	13.4	12.0	12.2	11.5	10.9
Lost workday cases	6.8	6.6	6.5	6.4	6.5	6.4	5.5	5.4	5.1	5.1
Lost workdays	120.4	122.7	134.0	132.2	137.3	137.6	132.0	142.7	–	–
Heavy construction, except building:										
Total cases	14.5	14.7	14.5	15.1	13.8	13.8	12.8	12.1	11.1	10.2
Lost workday cases	6.3	6.3	6.4	7.0	6.5	6.3	6.0	5.4	5.1	5.0
Lost workdays	127.3	132.9	139.1	162.3	147.1	144.6	160.1	165.8	–	–
Special trades contractors:										
Total cases	15.4	15.6	15.0	14.7	14.6	14.7	13.5	13.8	12.8	12.5
Lost workday cases	7.0	7.2	7.1	7.0	6.9	6.9	6.3	6.1	5.8	5.8
Lost workdays	133.3	140.4	135.7	141.1	144.9	153.1	151.3	168.3	–	–
Manufacturing										
Total cases	10.4	10.6	11.9	13.1	13.1	13.2	12.7	12.5	12.1	12.2
Lost workday cases	4.6	4.7	5.3	5.7	5.8	5.8	5.6	5.4	5.3	5.5
Lost workdays	80.2	85.2	95.5	107.4	113.0	120.7	121.5	124.6	–	–
Durable goods:										
Total cases	10.9	11.0	12.5	14.2	14.1	14.2	13.6	13.4	13.1	13.5
Lost workday cases	4.7	4.8	5.4	5.9	6.0	6.0	5.7	5.5	5.4	5.7
Lost workdays	82.0	87.1	96.8	111.1	116.5	123.3	122.9	126.7	–	–
Lumber and wood products:										
Total cases	18.5	18.9	18.9	19.5	18.4	18.1	16.8	16.3	15.9	15.7
Lost workday cases	9.3	9.7	9.6	10.0	9.4	8.8	8.3	7.6	7.6	7.7
Lost workdays	171.4	177.2	176.5	189.1	177.5	172.5	172.0	165.8	–	–
Furniture and fixtures:										
Total cases	15.0	15.2	15.4	16.6	16.1	16.9	15.9	14.8	14.6	15.0
Lost workday cases	6.3	6.3	6.7	7.3	7.2	7.8	7.2	6.6	6.5	7.0
Lost workdays	100.4	103.0	103.6	115.7	–	–	–	128.4	–	–
Stone, clay, and glass products:										
Total cases	13.9	13.6	14.9	16.0	15.5	15.4	14.8	13.6	13.8	13.2
Lost workday cases	6.7	6.5	7.1	7.5	7.4	7.3	6.8	6.1	6.3	6.5
Lost workdays	127.8	126.0	135.8	141.0	149.8	160.5	156.0	152.2	–	–
Primary metal industries:										
Total cases	12.6	13.6	17.0	19.4	18.7	19.0	17.7	17.5	17.0	16.8
Lost workday cases	5.7	6.1	7.4	8.2	8.1	8.1	7.4	7.1	7.3	7.2
Lost workdays	113.8	125.5	145.8	161.3	168.3	180.2	169.1	175.5	–	–
Fabricated metal products:										
Total cases	16.3	16.0	17.0	18.8	18.5	18.7	17.4	16.8	16.2	16.4
Lost workday cases	6.9	6.8	7.2	8.0	7.9	7.9	7.1	6.6	6.7	6.7
Lost workdays	110.1	115.5	121.9	138.8	147.6	155.7	146.6	144.0	–	–
Industrial machinery and equipment:										
Total cases	10.8	10.7	11.3	12.1	12.1	12.0	11.2	11.1	11.1	11.6
Lost workday cases	4.2	4.2	4.4	4.7	4.8	4.7	4.4	4.2	4.2	4.4
Lost workdays	69.3	72.0	72.7	82.8	86.8	88.9	86.6	87.7	–	–
Electronic and other electrical equipment:										
Total cases	6.4	6.4	7.2	8.0	9.1	9.1	8.6	8.4	8.3	8.3
Lost workday cases	2.7	2.7	3.1	3.3	3.9	3.8	3.7	3.6	3.5	3.6
Lost workdays	45.7	49.8	55.9	64.6	77.5	79.4	83.0	81.2	–	–
Transportation equipment:										
Total cases	9.0	9.6	13.5	17.7	17.7	17.8	18.3	18.7	18.5	19.6
Lost workday cases	3.9	4.1	5.7	6.6	6.8	6.9	7.0	7.1	7.1	7.8
Lost workdays	71.6	79.1	105.7	134.2	138.6	153.7	166.1	186.6	–	–
Instruments and related products:										
Total cases	5.2	5.3	5.8	6.1	5.6	5.9	6.0	5.9	5.6	5.9
Lost workday cases	2.2	2.3	2.4	2.6	2.5	2.7	2.7	2.7	2.5	2.7
Lost workdays	37.9	42.2	43.9	51.5	55.4	57.8	64.4	65.3	–	–
Miscellaneous manufacturing industries:										
Total cases	9.7	10.2	10.7	11.3	11.1	11.3	11.3	10.7	10.0	9.9
Lost workday cases	4.2	4.3	4.6	5.1	5.1	5.1	5.1	5.0	4.6	4.5
Lost workdays	73.2	70.9	81.5	91.0	97.6	113.1	104.0	108.2	–	–

See footnotes at end of table.

45. Continued—Occupational injury and illness rates by industry,[1] United States

Industry and type of case[2]	Incidence rates per 100 full-time workers[3]									
	1985	1986	1987	1988	1989[1]	1990	1991	1992	1993[4]	1994[4]
Nondurable goods:										
Total cases	9.6	10.0	11.1	11.4	11.6	11.7	11.5	11.3	10.7	10.5
Lost workday cases	4.4	4.6	5.1	5.4	5.5	5.6	5.5	5.3	5.0	5.1
Lost workdays	77.6	82.3	93.5	101.7	107.8	116.9	119.7	121.8	–	–
Food and kindred products:										
Total cases	16.7	16.5	17.7	18.5	18.5	20.0	19.5	18.8	17.6	17.1
Lost workday cases	8.1	8.0	8.6	9.2	9.3	9.9	9.9	9.5	8.9	9.2
Lost workdays	138.0	137.8	153.7	169.7	174.7	202.6	207.2	211.9	–	–
Tobacco products:										
Total cases	7.3	6.7	8.6	9.3	8.7	7.7	6.4	6.0	5.8	5.3
Lost workday cases	3.0	2.5	2.5	2.9	3.4	3.2	2.8	2.4	2.3	2.4
Lost workdays	51.7	45.6	46.4	53.0	64.2	62.3	52.0	42.9	–	–
Textile mill:										
Total cases	7.5	7.8	9.0	9.6	10.3	9.6	10.1	9.9	9.7	8.7
Lost workday cases	3.0	3.1	3.6	4.0	4.2	4.0	4.4	4.2	4.1	4.0
Lost workdays	57.4	59.3	65.9	78.8	81.4	85.1	88.3	87.1	–	–
Apparel and other textile products:										
Total cases	6.7	6.7	7.4	8.1	8.6	8.8	9.2	9.5	9.0	8.9
Lost workday cases	2.6	2.7	3.1	3.5	3.8	3.9	4.2	4.0	3.8	3.9
Lost workdays	44.1	49.4	59.5	68.2	80.5	92.1	99.9	104.6	–	–
Paper and allied products:										
Total cases	10.2	10.5	12.8	13.1	12.7	12.1	11.2	11.0	9.9	9.6
Lost workday cases	4.7	4.7	5.8	5.9	5.8	5.5	5.0	5.0	4.6	4.5
Lost workdays	94.6	99.5	122.3	124.3	132.9	124.8	122.7	125.9	–	–
Printing and publishing:										
Total cases	6.3	6.5	6.7	6.6	6.9	6.9	6.7	7.3	6.9	6.7
Lost workday cases	2.9	2.9	3.1	3.2	3.3	3.3	3.2	3.2	3.1	3.0
Lost workdays	49.2	50.8	55.1	59.8	63.8	69.8	74.5	74.8	–	–
Chemicals and allied products:										
Total cases	5.1	6.3	7.0	7.0	7.0	6.5	6.4	6.0	5.9	5.7
Lost workday cases	2.3	2.7	3.1	3.3	3.2	3.1	3.1	2.8	2.7	2.8
Lost workdays	38.8	49.4	58.8	59.0	63.4	61.6	62.4	64.2	–	–
Petroleum and coal products:										
Total cases	5.1	7.1	7.3	7.0	6.6	6.6	6.2	5.9	5.2	4.7
Lost workday cases	2.4	3.2	3.1	3.2	3.3	3.1	2.9	2.8	2.5	2.3
Lost workdays	49.9	67.5	65.9	68.4	68.1	77.3	68.2	71.2	–	–
Rubber and miscellaneous plastics products:										
Total cases	13.4	14.0	15.9	16.3	16.2	16.2	15.1	14.5	13.9	14.0
Lost workday cases	6.3	6.6	7.6	8.1	8.0	7.8	7.2	6.8	6.5	6.7
Lost workdays	107.4	118.2	130.8	142.9	147.2	151.3	150.9	153.3	–	–
Leather and leather products:										
Total cases	10.3	10.5	12.4	11.4	13.6	12.1	12.5	12.1	12.1	12.0
Lost workday cases	4.6	4.8	5.8	5.6	6.5	5.9	5.9	5.4	5.5	5.3
Lost workdays	88.3	83.4	114.5	128.2	130.4	152.3	140.8	128.5	–	–
Transportation and public utilities										
Total cases	8.6	8.2	8.4	8.9	9.2	9.6	9.3	9.1	9.5	9.3
Lost workday cases	5.0	4.8	4.9	5.1	5.3	5.5	5.4	5.1	5.4	5.5
Lost workdays	107.1	102.1	108.1	118.6	121.5	134.1	140.0	144.0	–	–
Wholesale and retail trade										
Total cases	7.4	7.7	7.7	7.8	8.0	7.9	7.6	8.4	8.1	7.9
Lost workday cases	3.2	3.3	3.4	3.5	3.6	3.5	3.4	3.5	3.4	3.4
Lost workdays	50.7	54.0	56.1	60.9	63.5	65.6	72.0	80.1	–	–
Wholesale trade:										
Total cases	7.2	7.2	7.4	7.6	7.7	7.4	7.2	7.6	7.8	7.7
Lost workday cases	3.5	3.6	3.7	3.8	4.0	3.7	3.7	3.6	3.7	3.8
Lost workdays	59.8	62.5	64.0	69.2	71.9	71.5	79.2	82.4	–	–
Retail trade:										
Total cases	7.5	7.8	7.8	7.9	8.1	8.1	7.7	8.7	8.2	7.9
Lost workday cases	3.1	3.2	3.3	3.4	3.4	3.4	3.3	3.4	3.3	3.3
Lost workdays	47.0	50.5	52.9	57.6	60.0	63.2	69.1	79.2	–	–
Finance, insurance, and real estate										
Total cases	2.0	2.0	2.0	2.0	2.0	2.4	2.4	2.9	2.9	2.7
Lost workday cases	.9	.9	.9	.9	.9	1.1	1.1	1.2	1.2	1.1
Lost workdays	15.4	17.1	14.3	17.2	17.6	27.3	24.1	32.9	–	–
Services										
Total cases	5.4	5.3	5.5	5.4	5.5	6.0	6.2	7.1	6.7	6.5
Lost workday cases	2.6	2.5	2.7	2.6	2.7	2.8	2.8	3.0	2.8	2.8
Lost workdays	45.4	43.0	45.8	47.7	51.2	56.4	60.0	68.6	–	–

[1] Data for 1989 and subsequent years are based on the *Standard Industrial Classification Manual*, 1987 Edition. For this reason, they are not strictly comparable with data for the years 1985–88, which were based on the *Standard Industrial Classification Manual*, 1972 Edition, 1977 Supplement.

[2] Beginning with the 1992 survey, the annual survey measures only nonfatal injuries and illnesses, while past surveys covered both fatal and nonfatal incidents. To better address fatalities, a basic element of workplace safety, BLS implemented the Census of Fatal Occupational Injuries.

[3] The incidence rates represent the number of injuries and illnesses or lost workdays per 100 full-time workers and were calculated as (N/EH) X 200,000, where:

N = number of injuries and illnesses or lost workdays;
EH = total hours worked by all employees during the calendar year; and
200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

[4] Beginning with the 1993 survey, lost workday estimates will not be generated. As of 1992, BLS began generating percent distributions and the median number of days away from work by industry and for groups of workers sustaining similar work disabilities.

[5] Excludes farms with fewer than 11 employees since 1976.

– Data not available.

46. Fatal occupational injuries by event or exposure, 1992–95

Event or exposure[1]	Fatalities				
	1992	1993	1994	1995	
	Number	Number	Number	Number	Percent
Total	6,217	6,331	6,632	6,210	100
Transportation incidents	2,484	2,501	2,762	2,560	41
Highway	1,158	1,243	1,343	1,329	21
Collision between vehicles, mobile equipment	578	657	654	634	10
Moving in same direction	78	99	120	125	2
Moving in opposite directions, oncoming	201	244	230	244	4
Moving in intersection	107	123	144	97	2
Vehicle struck stationary object or equipment	192	190	255	268	4
Noncollision	301	336	373	350	6
Jackknifed or overturned—no collision	213	237	274	260	4
Nonhighway (farm, industrial premises)	436	392	409	388	6
Overturned	208	212	226	210	3
Aircraft	353	282	426	278	4
Worker struck by a vehicle	346	365	391	385	6
Water vehicle	109	120	94	84	1
Railway	88	86	81	82	1
Assaults and violent acts	1,281	1,329	1,321	1,262	20
Homicides	1,044	1,074	1,080	1,024	16
Shooting	852	884	934	754	12
Stabbing	90	95	60	67	1
Other, including bombing	102	95	86	203	3
Self-inflicted injury	205	222	214	215	3
Contact with objects and equipment	1,004	1,045	1,017	915	15
Struck by object	557	566	590	546	9
Struck by falling object	361	346	372	340	5
Struck by flying object	77	82	68	63	1
Caught in or compressed by equipment or objects	316	309	280	255	4
Caught in running equipment or machinery	159	151	147	131	2
Caught in or crushed in collapsing materials	110	138	132	99	2
Falls	600	618	665	643	10
Fall to lower level	507	533	580	573	9
Fall from ladder	78	76	86	97	2
Fall from roof	108	120	129	142	2
Fall from scaffold	66	71	89	82	1
Fall on same level	62	49	63	50	1
Exposure to harmful substances or environments	605	592	641	598	10
Contact with electric current	334	325	348	347	6
Contact with overhead powerlines	140	115	132	139	2
Contact with temperature extremes	33	38	50	55	1
Exposure to caustic, noxious, or allergenic substances	127	115	133	101	2
Inhalation of substances	83	68	84	62	1
Oxygen deficiency	111	111	109	94	2
Drowning, submersion	78	89	89	74	1
Fires and explosions	167	204	202	208	3
Other events or exposures[2]	76	43	24	24	–

[1] Based on the 1992 BLS Occupational Injury and Illness Classification Structures.

[2] Includes the category "Bodily reaction and exertion."

NOTE: Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. Dashes indicate less that 0.5 percent or data that are not available or that do not meet publication criteria.

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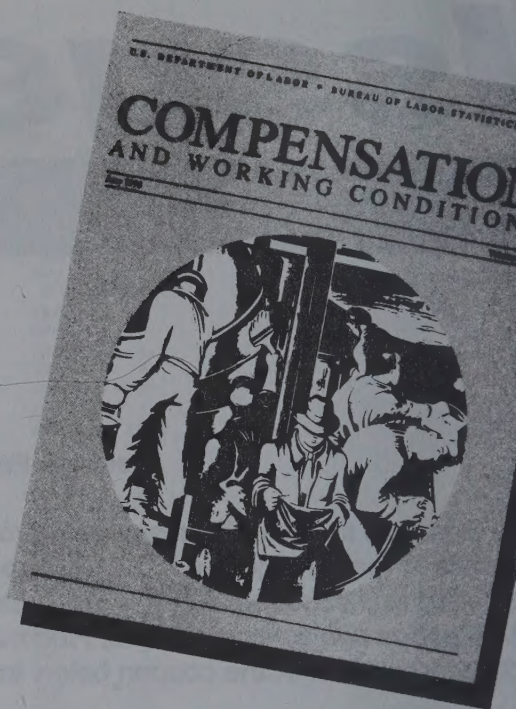

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Productivity and costs:							
Nonfinancial corporations	March 11	4th quarter					2; 38–41
Nonfarm business and manufacturing					May 7	1st quarter	2; 38–41
Producer Price Indexes	March 14	February	April 11	March	May 14	April	2; 30–32
Consumer Price Indexes	March 19	February	April 15	March	May 15	April	2; 27–29
Real earnings	March 19	February	April 15	March	May 15	April	13–16
U.S. Import and Export Price Indexes	March 21	February	April 22	March	May 21	April	33–37
Employment Cost Indexes			April 29	1st quarter			1–3; 21–24